Utah Asthma Community Health Worker Training Evaluation Results 2016

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Overview

Purpose of the Evaluation

The purpose of the evaluation is to identify strengths and weaknesses from the Utah Asthma Community Health Worker (CHW) Training, offered May 18th and 25th of 2016. The evaluation asseses the quality of trainer presentations, the quality of training content, the knowledge gained by participants, and the applicability of the training content. In completing the evaluation, the Utah Asthma Program (UAP) hopes to gain insight into how to improve the Utah Asthma CHW Training for future implementation.

Background

The UAP is funded by the CDC to provide comprehensive asthma control services, including the promotion of team-based care in health systems. CHWs are effective members of multidisciplinary team-based care[1], particularly in the comprehensive care of asthma. Multiple studies have shown the effectiveness of CHWs acting as culturally competent mediators between providers of health services and members of diverse communitities to improve the management of chronic diseases, including asthma.[2,3,4] CHWs are particularly valued in providing recommended asthma interventions, including home environmental trigger assessment, remediation, and self-management education,[5,6] to low-income, ethnic mintority populations.[7,8,9] CHWs have the trust of the communities they come from and are, therefore, able to expand reach, significantly increase the effectiveness, and use their superior understanding of the community to improve the delivery of the asthma intervention.[7,8,9,10] Using CHWs, who are not licensed health care professionals, to deliver asthma interventions also keeps intervention costs down while still allowing licensed health care professionals to work "at the top of their license" by allowing them to provide more advanced clinical services.[7,8,9,11]

The UAP partnered with the state CHW Advisory Board and statewide CHW Coalition to develop and promote a CHW workforce in Utah, including the development of a state CHW core competency training. The UAP collaborated with stakeholders to develop and pilot an asthma-specific CHW training called the Utah Asthma CHW Training. This training will be offered as an optional module to the state core competency training. Individuals were recruited from the Asthma Task Force, Utah CHW organizations, and CHW Advisory Board to develop the training. The group is called the Asthma CHW Workgroup. The Asthma CHW Workgroup met monthly from March 2015 through May 2016 to evaluate other state asthma CHW trainings, select appropriate trainings and formats, adapt trainings to meet the needs of Utahns, determine recruitment size and criteria for the training, and establish a date for pilot training. Participants who complete the Asthma CHW Training module will then have the opportunity to receive additional training on the Utah Asthma Home Visiting Program. The Utah Asthma Home Visiting Program provides a framework for CHWs to apply the training content in the home setting to improve asthma management.

The Utah Asthma CHW Training covers two-eight hour days of interactive learning and application of CHW skills in the asthma context. Each day consists of two sessions, one in the morning and one in the afternoon. The morning session on the first day of training covered asthma basics, asthma medications, and asthma devices. The afternoon session covered asthma management and control best-practices. A week later, the morning session covered asthma triggers and remediation strategies, and the afternoon session covered motivational interviewing. Five trainers were recruited to implement the training sessions. The UAP provided the trainers the outline for their section of the presentation and sent formats and requirements for their PowerPoint presentation development. Participants were provided a binder with trainer PowerPoint presentations, a generic asthma flip chart, and asthma resources and materials. Each participant was also given an airway model, donated by AstraZeneca (see Appendix A for an agenda of the training and Appendix B for the full training outline).

Participants that attended both days of the training were emailed a certificate of completion following the training (see Appendix C).

The Asthma CHW Workgroup determined that the optimal number of participants per training cohort is 12 to 15. This smaller cohort size allows for more intimate discussion and application of the training materials. The UAP recruited participants from health systems and community-based organizations representing a variety of communities in Utah (see Appendix D for the email template to recruit participants and Appendix E for the training recruitment flier). As part of the pilot, the UAP worked with stakeholders to generate evaluation questions and develop evaluation tools to determine the effectiveness of the training and identify ways to improve it. The evaluation results and recommendations will be used to improve the training for the next planned training in the Spring of 2017. The training will eventually be offered on a regular basis as a module to the state core competency training. Evaluation results will continue to be applied from each training for continued improvement and to ensure that materials and presentations incorporate the most current and relevant information.

Methodology

The evaluation was carried out using a non-experimental design and data were collected using a mixed methods approach. The data were collected through daily pre- and post-knowledge tests, sections or morning and afternoon evaluations, evaluation of the overall program at the end of the training, a debriefing meeting with trainers to discuss successes and weaknesses of the training, and a three-month post training survey to participants and employers. The three-month post training survey to participants included knowledge questions to assess retention of learned content, questions assessing usefulness of the training materials, and participant feedback on successful application of the training content. The three-month post training employer survey assessed employer satisfaction of the training in improved employee performance and perception of value of the training. The Asthma CHW Workgroup reviewed the evaluation findings to determine which evaluation findings to apply to the training and how.

In the knowledge self-assessment and sections evaluation, the UAP used a post self-assessment agreement questionnaire using a retrospective pretest methodology. The retrospective pre-post methodology asks the participant to assess their knowledge and skill set before and after the training intervention at the end of the intervention. This has been shown to reduce participation self-reflection bias. Participants were asked to assess knowledge and skills after the intervention to provide a more accurate and conservative estimate of pre-intervention knowledge or skills than what they would provide prior to the intervention.[12] Retrospective pretest methodology has been shown to be a valid and more convenient way to measure the change in skills that occurs when participants take a training program.[13,14,15]

Evaluation Questions

The Asthma CHW Workgroup created evaluation questions during the November and December 2015 monthly meetings, and provided feedback on the evaluation data collection tools generated by the UAP staff. The questions and tools were vetted through the UAP, the contracted evaluator, and the Utah CHW Advisory Board. The evaluation questions were used throughout the evaluation process, especially when designing data collection instruments and analyzing results. These questions will be answered throughout the remainder of the report:

1. Are participants gaining knowledge?
2. Do participants know how to apply that knowledge?
3. Do participants feel the program was clear, engaging, and useful?
4. How can UAP improve the training?

Data Collection

Evaluation tools (see Table 1):

- Daily pre- and post-knowledge tests (4 total)
    - The pre-test was offered through SurveyMonkey a few days prior to the training day for both days of the training. Participants were emailed the link to the pre-test two times prior to the training. The post-test was offered in person at the end of the training day. The post-test also utilized the retrospective pretest methodology to ask self-assessment questions for pre-training and post-training. The completion rate for the pre-post tests was high. All participants completed the pre-test for Day 1 and post-test for Day 1 and 2. The pre-test for Day 2 was completed by 11 of the 12 participants. See appendices F-H for pre and post tests.
- Section evaluations (4 total)
    - Evaluations were available in the participant binders and participants were encouraged to complete the assessment after each section in the training. All 12 participants completed the four sectional participant evaluations. See Appendix J for all four sectional participant evaluation tools.
- Participant evaluation of overall program (1 total)
    - This was available in the participant binders and participants were encouraged to complete the overall program evaluation at the end of the second day of training. All 12 participants completed the overall evaluations. See Appendix K for the participant evaluation of overall program tool.
- Assessment by the Utah CHW Core Competency Training Developer and member representative from the Utah CHW Advisory Board
    - The Developer attended the trainings and provided written feedback on the overall training.
- Assessment and feedback by the Utah Asthma CHW Trainers
    - After the pilot was completed, the UAP held a focus group meeting with the trainers to discuss the strengths and weaknesses of the training and provide suggestions for improvement. All of the trainers and a few of the observers attended and contributed to the meeting discussion.
- Three-month post training survey to participants
    - This survey was available through SurveyMonkey and was emailed to participants. Out of the 12 participants emailed, six completed the survey. See Appendix L for the three-month post-training participant survey questions.
- Three-month post training survey to employers of participants
    - This survey was available through SurveyMonkey and emailed to the employers of the participants. Out of the 11 employers emailed, four completed the survey. See Appendix M for the three-month post-training employer survey questions.

Table 1: Evaluation Tools Overview

Time	Evaluation Tools
Day 1	
Morning	• Participant Information • Day 1 Pre- training knowledge test • Day 1 Section 1 participant evaluation
Afternoon	• Day 1 Section 2 participant evaluation • Day 1 Post- training knowledge test • Day 1 Pre/post training knowledge gain self-assessment
Day 2	
Morning	• Day 2 Pre training knowledge test • Day 2 Section 1 participant evaluation
Afternoon	• Day 2 Section 2 participant evaluation • Day 2 Post training knowledge test • Day 2 Pre/post training knowledge gain self-assessment • Participant evaluation of overall program The week after: • debriefing meeting with trainers
Three months after training	
	• Three-month post training survey to employer • Three-month post training survey to participants

Data Analysis

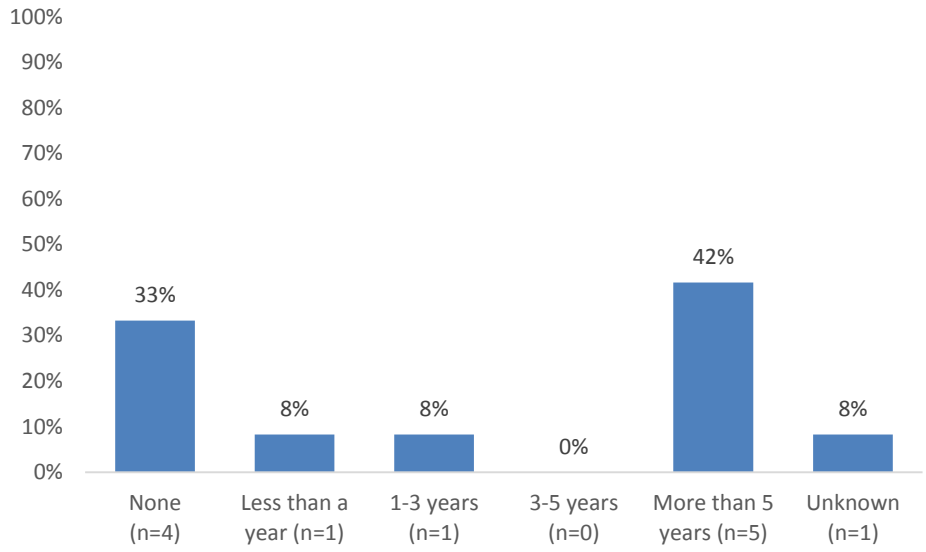
The analyses for this project were mostly completed in Microsoft Excel. Demographic data was collected through participant information sheets. Assessment data was put into Excel spreadsheets in order to create graphs and charts. Qualitative data was analyzed for themes and presented in word clouds and lists. Representative quotes were selected to showcase overall themes.

Results

Demographics

The UAP recruited 12 participants representing 11 different CHW and health system organizations in Utah. Eleven of the 12 participants were female. All spoke English, 50% spoke Spanish, and one spoke Tongan. Participant race were the following: White: 75% (n=9), Hispanic: 8.3% (n=1), Asian/Pacific Islander: 8.3% (n=1) , and African American: 8.3% (n=1). All participants were interested in additional training. Most participants had some college or technical school (25%) or a Bachelor's Degree or higher level of education (59%). The UAP aimed to have a broad range of experienced CHWs to participate and provide feedback in the pilot. The participants were split in their experience working or volunteering as a CHW. Half the participants had one or more years of experience and half had less than a year of experience (See Graph 1).

Graph 1. The majority of participants either had a lot or no CHW experience.
Percentage of Participants by Years Working as a CHW



58% (n=7) of the participants reported that "some" of their patient population have asthma. When asked what their daily roles and activities are, the participants mostly responded "outreach" and "community" (See Figure 1). Based on individual responses, "community" is referring to working in the community. Figure 1. is a word cloud which shows by size the most common responses for daily activities and roles. The larger the word, the more common the response.

Figure 1: Participant Daily Roles and Activities Word Cloud

Evaluation Questions

Question 1: Knowledge Gained

The first evaluation question was "are participants gaining knowledge?" The Asthma CHW Workgroup determined that this question would be measured using the pre- and post-training knowledge tests, the pre- and post-training knowledge gained self-assessment, and the section evaluation question asking the participant to rate their understanding of the subject before and after each section of the training.

The evaluation results showed that on average, participants had increased scores in the asthma knowledge tests and asthma knowledge self-assessment results for Day 1 and Day 2 content.

Pre- and Post-Training Knowledge Tests

The pre- and post- training knowledge tests are a set of multiple choice and fill-in-the-blank response questions. The questions are the same in the pre- and the post-test versions for each day. Day 1 pre- and post-test had 13 questions; Day 2 pre- and post-test had 11 questions. The questions for each day's test reflects the content covered for that day of the training. The Asthma CHW Workgroup determined that success would be measured by an average 25% increase in post-test score from pre-test score. On average, the scores for Day 1 increased 29% and the scores for day 2 increased 14% (see Table 2).

Table 2: Benchmarks for knowledge increase was met for Day 1 but not for Day 2.
Pre- and Post - Knowledge Test Average Scores by Day 1 and Day 2

	Day 1 Scores (out of 100%)	Day 2 Scores (out of 100%)
Pre-Test	55%	73%
Post-Test	83%	87%
Change	+29%	+14%

Three-Month Post-Training Knowledge Test

Three months after the completion of the training, participants were emailed a follow-up survey to measure retention of knowledge. This survey included eight of the original pre- and post-test questions generated from Day 1 and Day 2 of the training. To keep the three-month post-training survey a reasonable length, the UAP used only two questions per section of the training for the three-month post-training knowledge test. In order to compare the results from the training post-test to the three-month post training results, the UAP averaged the scores from the same questions that were on the three-month follow-up survey. The UAP calculated the pre- and post-test averages for those eight questions from the training to compare to the knowledge retention questions three-months post training. Results showed a 5.2 point increase from modified pre- to post-test, and a 3.3 point gain from post-test to three-month follow-up survey (see Table 3).

Table 3: There was knowledge retention from the end of the training to the three-month follow-up.
Pre- and Post-Test Average Scores Compared to Three-Month Post-Training Survey

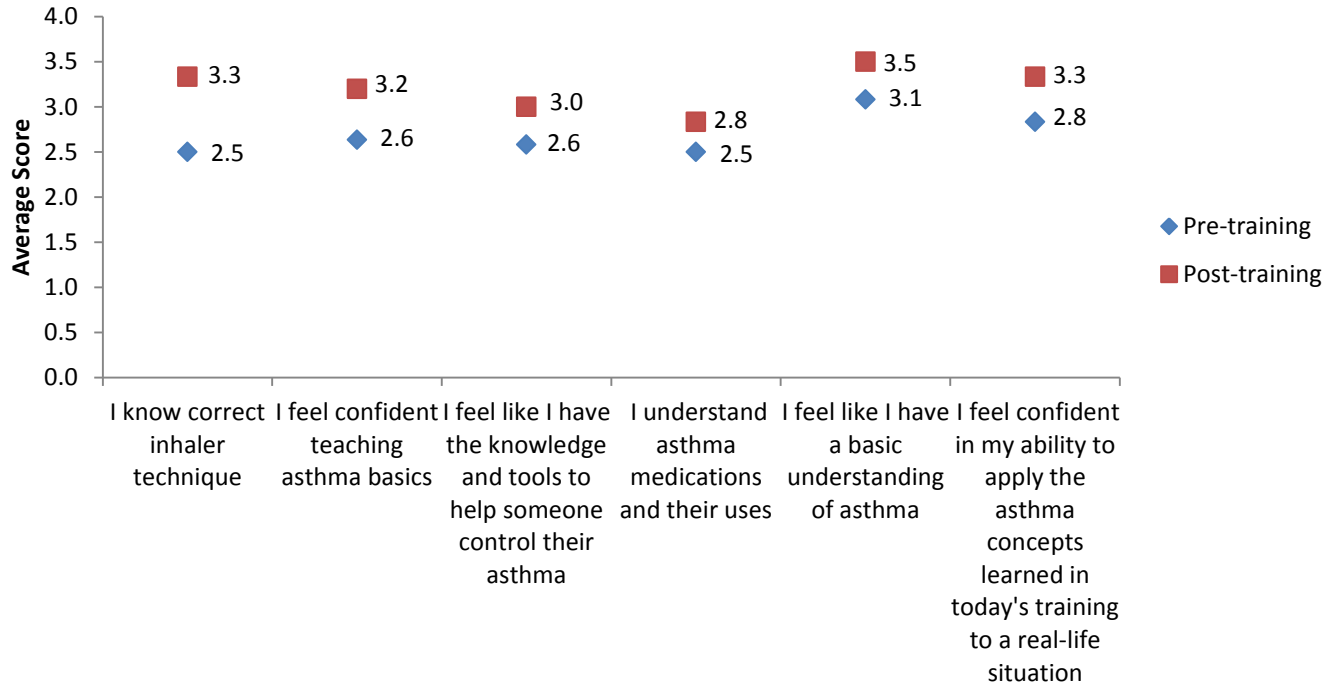
	Scores (out of 100%)	Change in Scores
Modified Pre-Test Training	76.9%	
Modified Post-Test Training	82.1%	↑ 5.2%
Three Month Follow-up Survey	85.4%	↑ 3.3%

Pre- and Post-Training Knowledge Gained Self-Assessments

In addition to the knowledge-based questions, the Asthma CHW Workgroup included a list of statements reflecting asthma knowledge and skills that should be gained during the course of the training. Participants were asked to rate their level of agreement to the set of statements with strongly disagree, disagree, agree, and strongly agree options. This self-assessment was included at the end of the post-test each day of the training. Each answer was assigned a numeric value (i.e. strongly disagree=1). A higher score means a higher level of agreement. The Asthma CHW Workgroup determined that success would be measured by a one point increase in the average post-assessment response from pre-assessment response. For Day 1 , the results of the knowledge gained self-assessments showed consistent increases in responses from pre- to post-test, but not at a one-point level (See Graph 2). For Day 2, the results of the knowledge gained self-assessments did not show a one-point increase for most categories but did show larger gains when compared to Day 1. (see Graph 3). The two categories where there was an average one-point increase on Day 2 were "I feel confident in my role as a CHW to assist someone with asthma" and "I feel confident in my ability to apply the asthma concepts learned in today's training to a real-life situation."

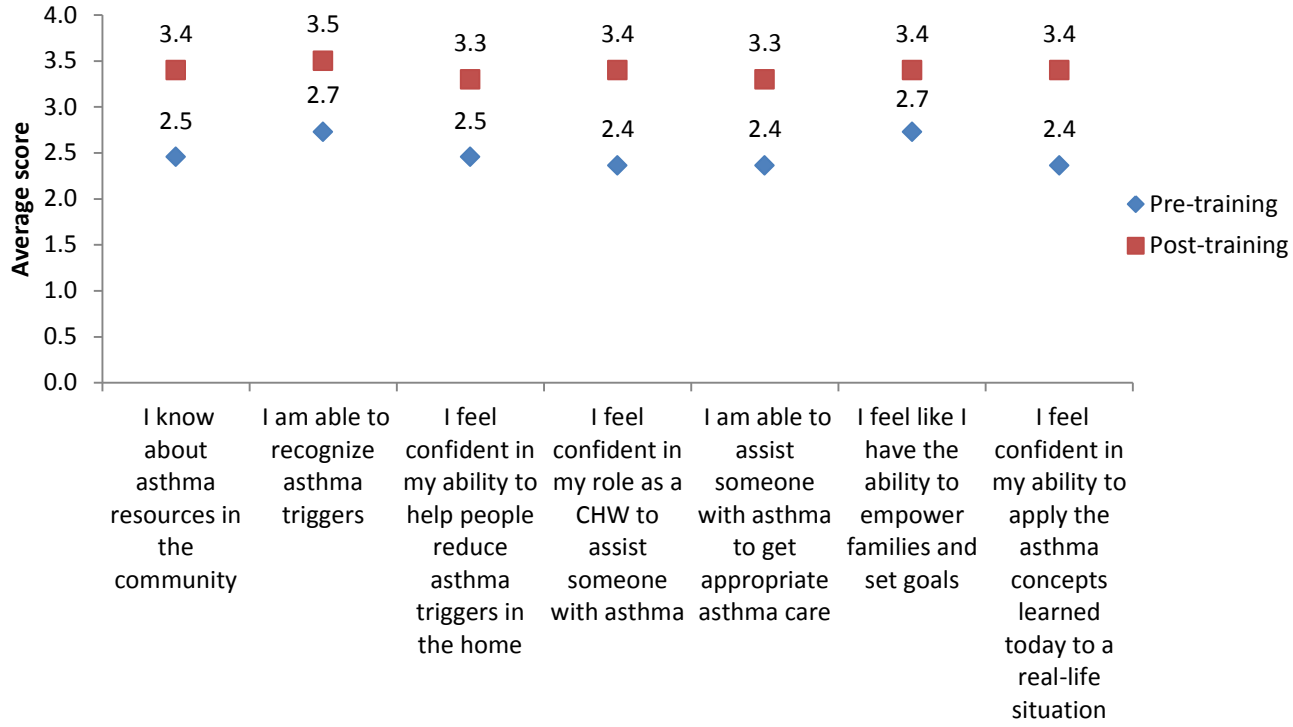
Graph 2: Day 1 did not meet the goal of a one-point increase in self-assessment from pre- to post- training assessments.

Day 1 Knowledge Self-Assessment Average Score



1- strongly disagree, 2- disagree, 3- agree, 4- strongly agree

Graph 3: Day 2 showed a larger increase in self-assessment scores than Day 1.
Day 2 Knowledge Self-Assessment Average Scores

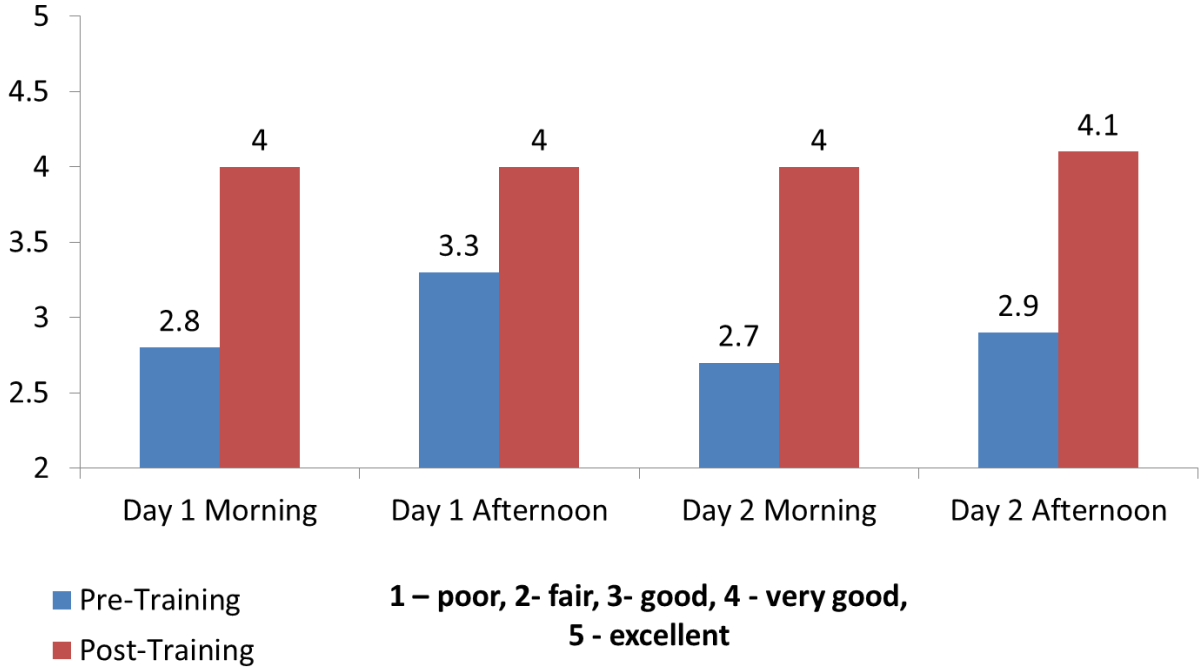


1- strongly disagree, 2- disagree, 3- agree, 4- strongly agree

Section Participant Evaluation

Each section of the training included a section evaluation where participants were asked to answer a set of questions about the training (Section Evaluation questions are available in Appendix J). One of the questions on the section evaluation was for the participant to rank their understanding of the subject in each section (poor, fair, good, very good, excellent). Each answer was assigned a numeric value (i.e. poor=1). A higher score means a higher level of understanding. The Asthma CHW Workgroup determined that success would be measured by a one level increase in post-assessment response from pre-assessment response. Participants showed a consistent increase in the average score in understanding of the subject matter for each section of the training (See Graph 4).

Graph 4: Participants' understanding of each section greatly increased post-training.
Average Pre- and Post-Training Knowledge Scores by Section

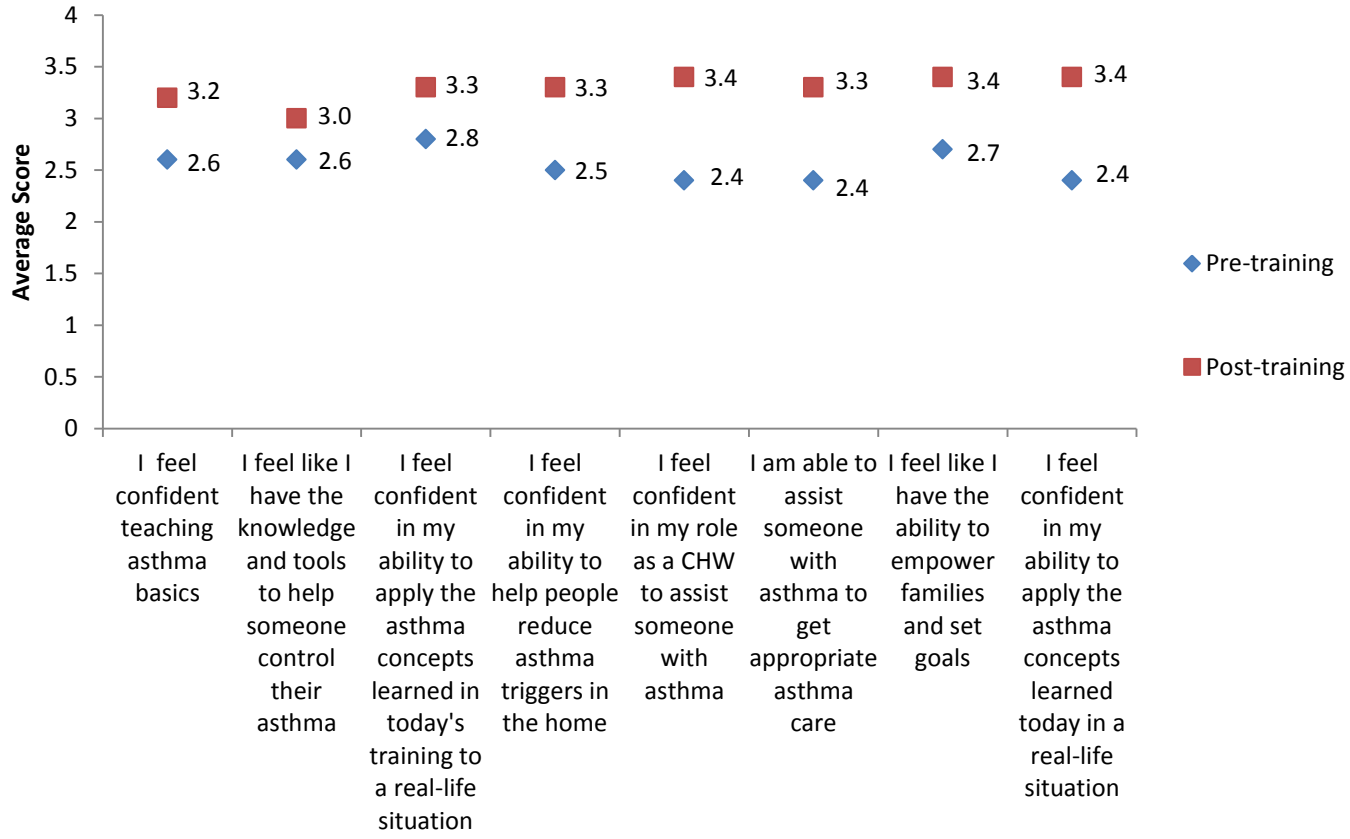


Question 2: Confidence and Ability

The second evaluation question was "Do participants know how to apply the knowledge gained?" The Asthma CHW Workgroup determined that this question would be measured from the pre- and post-training knowledge gained self-assessment questions about confidence and ability. Each answer was assigned a numeric value (i.e. strongly disagree=1). A higher score means a higher level of agreement. Success was measured by a one-point increase in post-assessment response from pre-assessment response. Day 1 had three questions assessing confidence and ability, and Day 2 had five questions. Questions assessing confidence and ability differed between Day 1 and Day 2 due to different content and skills gained in the training content each day.

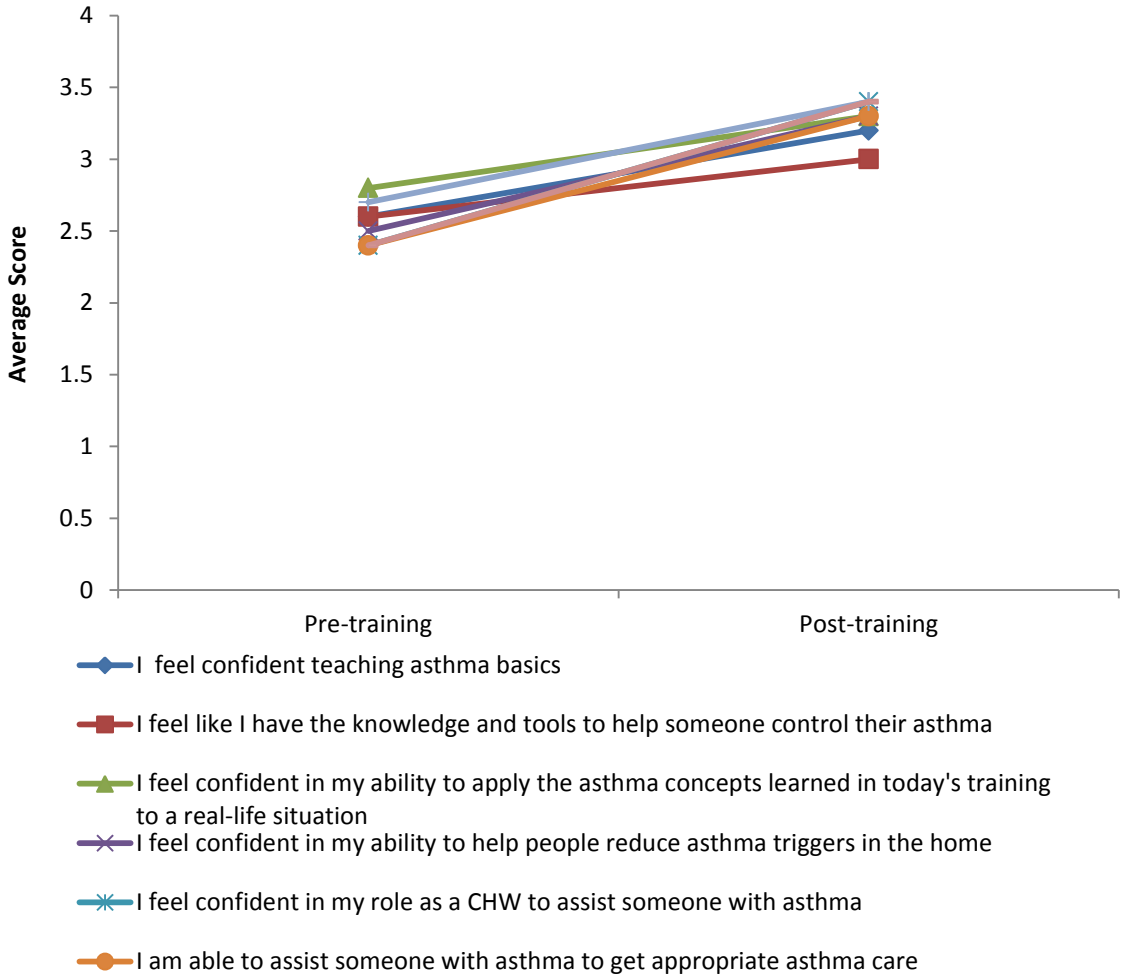
Results of the assessment showed about a one-point increase from pre-training to post-training assessment responses, and a general increase in self-reported confidence and ability (see Graph 5 and 6).

Graph 5: Community health workers gained confidence in asthma topics.
Average Score from Confidence Questions from Pre- and Post- Training Assessments



1- strongly disagree, 2- disagree, 3- agree, 4- strongly agree

Graph 6: Community health workers gained confidence in asthma topics
Confidence Questions from Pre- and Post- Training in Line Graph



1- strongly disagree, 2- disagree, 3- agree, 4- strongly agree

Three-Month Post Training Participant Survey

Three months after the training, the majority of participants (83.3%, n=5) reported that they had changed their practice as a result of the training. Participants also reported being more aware of clients as they talk about their physical health and symptoms related to asthma, increased awareness and confidence due to the training content, having more ideas on how to help individuals manage their asthma, and better attention skills when talking to people.

Participants were asked to share success stories of applying the training with their asthma patients. Most reported not having an opportunity to apply the training yet as the people they serve have different chronic conditions. One participant reported applying it in their family, with good results.

Question 3: Quality of Training

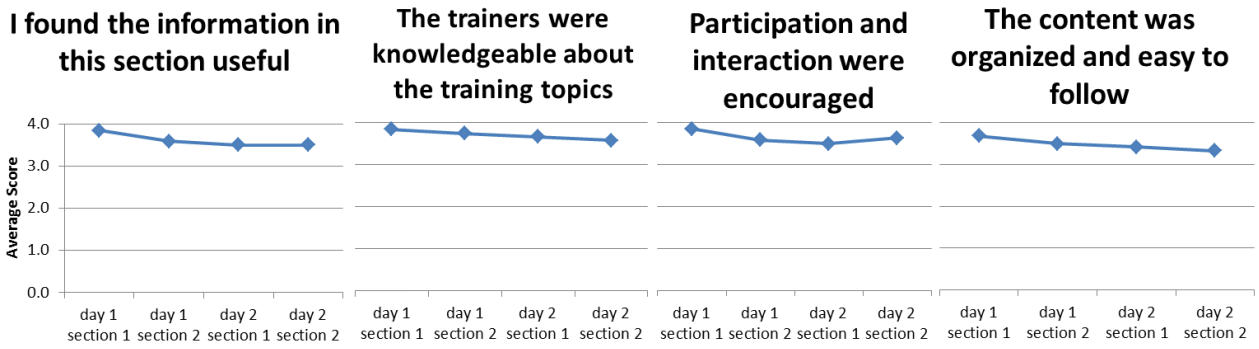
The third evaluation question was "Do participants feel that the training was clear, engaging, and useful?" The Asthma CHW Workgroup determined that this question would be measured from the participant evaluation of each training section and the participant evaluation of the overall program. Success was measured by the majority of participants reporting at "agree," "yes," or "good" for each assessment question, and by the majority of participants providing positive feedback in the open-ended questions. Each answer was assigned a numeric value (i.e. strongly disagree=1 and strongly agree=4). A higher score means a higher level of agreement.

Results of the assessment showed that the participants felt the training was of high quality. The training was engaging, useful, and clear, and participants used training materials and skills after completion of the training program.

Section Evaluation Results

The participants were asked to complete the section evaluations after each section of the training. The questions for each section were the same, and are compiled in Graph 7 for easy comparison between sections and days of the training. Overall, statements regarding the quality and clarity of the trainers and training content were at "agree/strongly agree." Average scores were consistently high (i.e. close to the top of the scale) across days and sections; however, the slight decrease from Day 1 to Day 2 could be a result of participants feeling some information was redundant or presenter preference was lower.

Graph 7: Participants generally agreed/strongly agreed that the information was useful and clear.
Presentation of Evaluation Results from Section Participant Evaluation



1- strongly disagree, 2- disagree, 3- agree, 4- strongly agree

Participants were also asked if they intended to use any of the skills or knowledge from each session in their work. All (100%) participants answered "yes" for each section. See Table 4 for the list of skills the participants specifically listed that they will use.

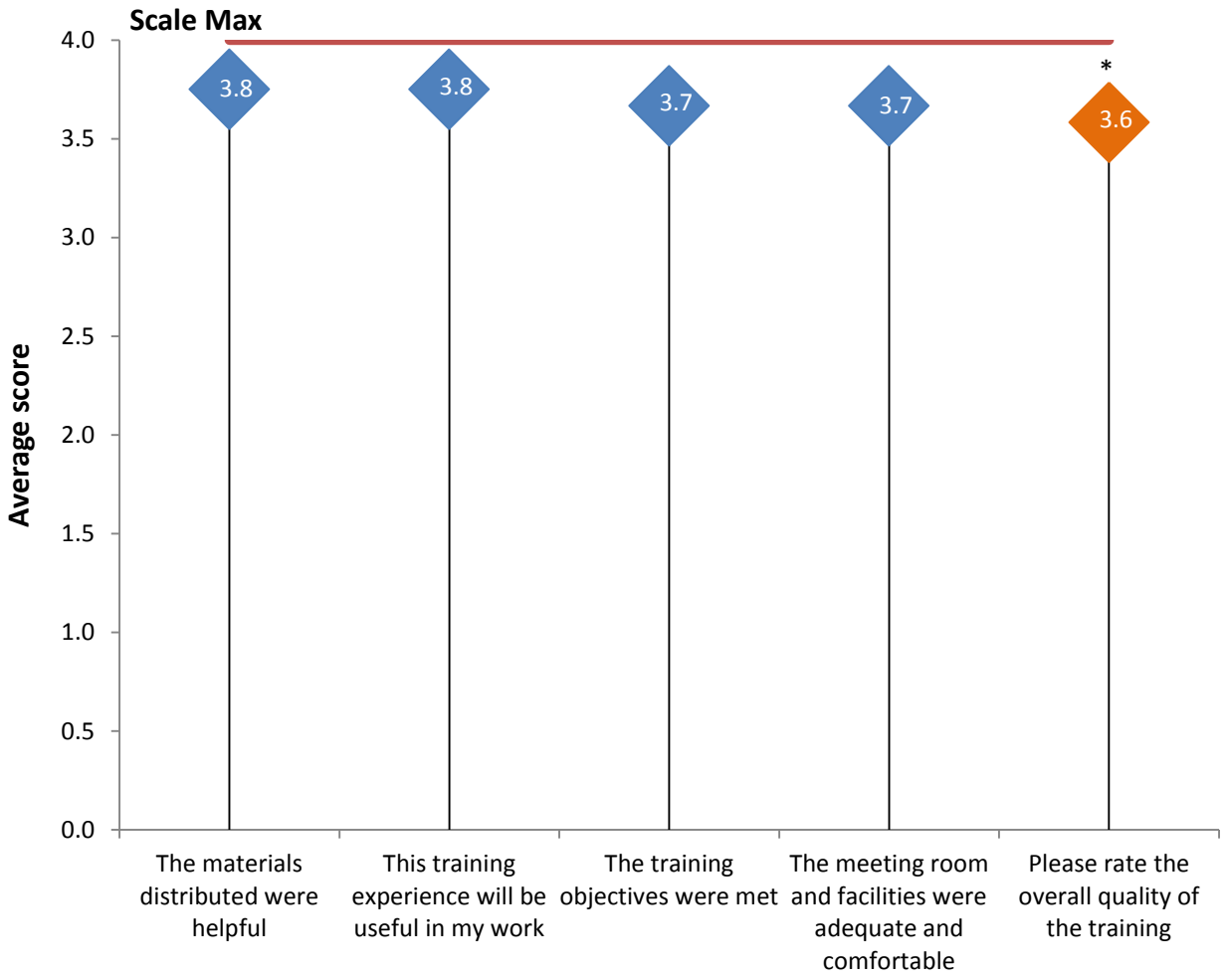
Table 4: Skills Participants Will Use From the Training

Day and Section	Skills Listed by Participants	Percent of Participants that Answered "yes" to Using the Skills from this Section
Day 1 Section 1	• Interactive Activities/models • Ideas for teaching children and families	100%
Day 1 Section 2	• Presentation materials • Medication education and assistance • Asthma resources • Signs and symptoms	100%
Day 2 Section 1	• Trigger education • Trigger remediation in the home	100%
Day 2 Section 2	• Motivational interviewing tools • Open-ended questions	100%

Overall Training Evaluation

At the end of Day 2, the participants were encouraged to complete an overall training evaluation. Each evaluation question response was assigned a numeric value (i.e. strongly disagree=1) to create a scale from 1 to 4. A higher score means a higher level of agreement. For each question, the response options were coded as follows: 1-strongly disagree, 2-disagree, 3-agree, 4-strongly agree. The overall quality of the evaluation question was coded as follows: 1-poor, 2-fair, 3-good, 4-very good, 5-excellent. Participants had an average score of 3.6-3.8 meaning they "agree/strongly agree" with the list of statements. The overall quality of the training was rated at "good/very good" with an average score of 3.6 (see Graph 8).

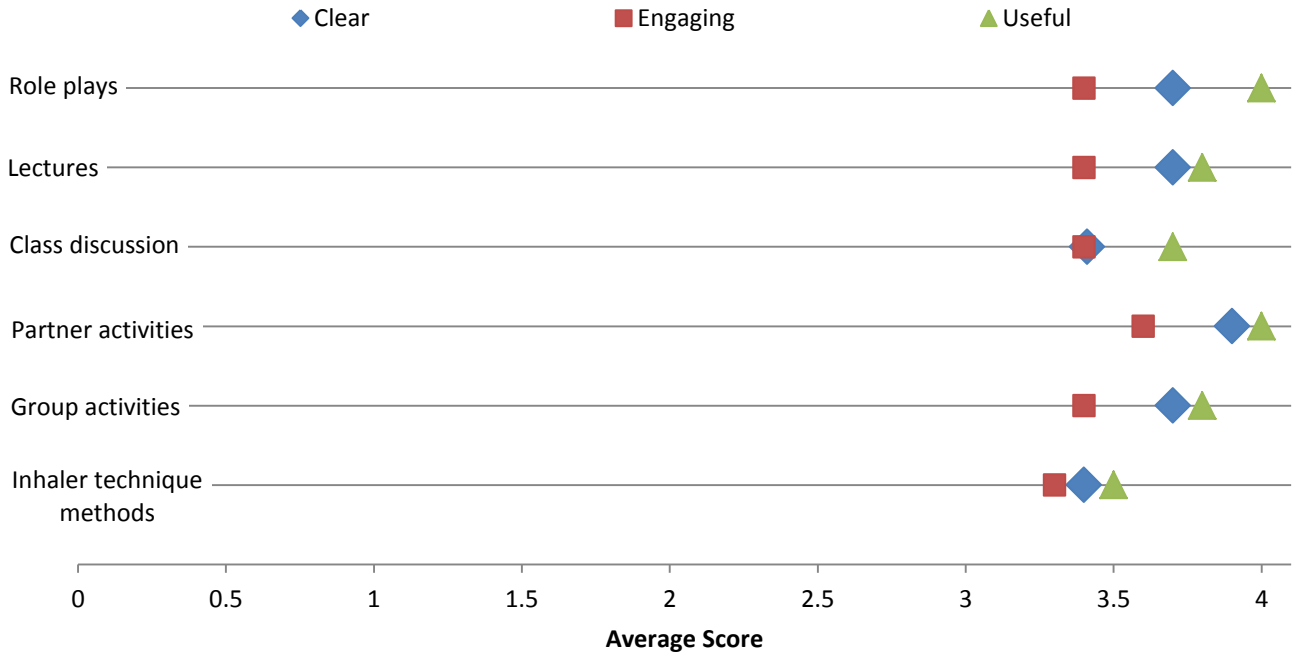
Graph 8: Overall Training Evaluation Average Scores



* Scale max is 5.

The evaluation of the overall training included a chart for participants to fill out regarding the clarity, engagement, and usefulness of the training by content area (see Table 5 and Graph 9). Each evaluation question response was assigned a numeric value (i.e. poor=1) to create a scale from 1 to 4. A higher score means higher quality. For each question, the response options were coded as follows: 1-poor, 2-fair, 3-good, 4-very good, 5-excellent. An average score was calculated for each question. Overall, participants responded "good/excellent" or had an average score between 3.4 and 4 for each content area being clear, engaging, and useful. Role playing was rated the least clear, engaging, and useful compared to the other content areas with an average combined score of 3.4 (see Graph 10). The class discussion and the inhaler technique methods were the clearest content area, the most engaging, and useful, with an average combined score of 3.8 for each content area (see Graph 10).

Graph 9: Average Scores for Training Content being Clear, Useful, and Engaging. See Table 5 for data.



Graph 10: Combined Average Scores of Training Being Clear, Engaging, and Useful, by Content Area See Table 5 Data.

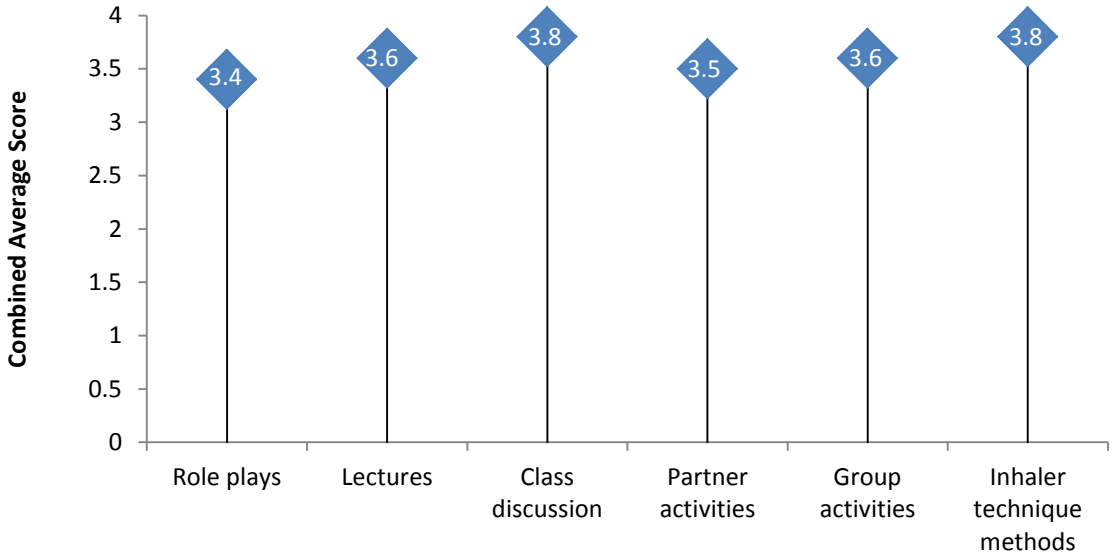


Table 5: Average Scores for Training Content Area being Clear, Engaging, and Useful

Content area	Average Score			Combined Average Total
	Clear	Engaging	Useful	
Role plays	3.4	3.3	3.5	3.4
Lectures	3.7	3.4	3.8	3.6
Class discussion	3.9	3.6	4.0	3.8
Partner activities	3.4	3.4	3.7	3.5
Group activities	3.7	3.4	3.8	3.6
Inhaler technique methods	3.7	3.4	4.0	3.8

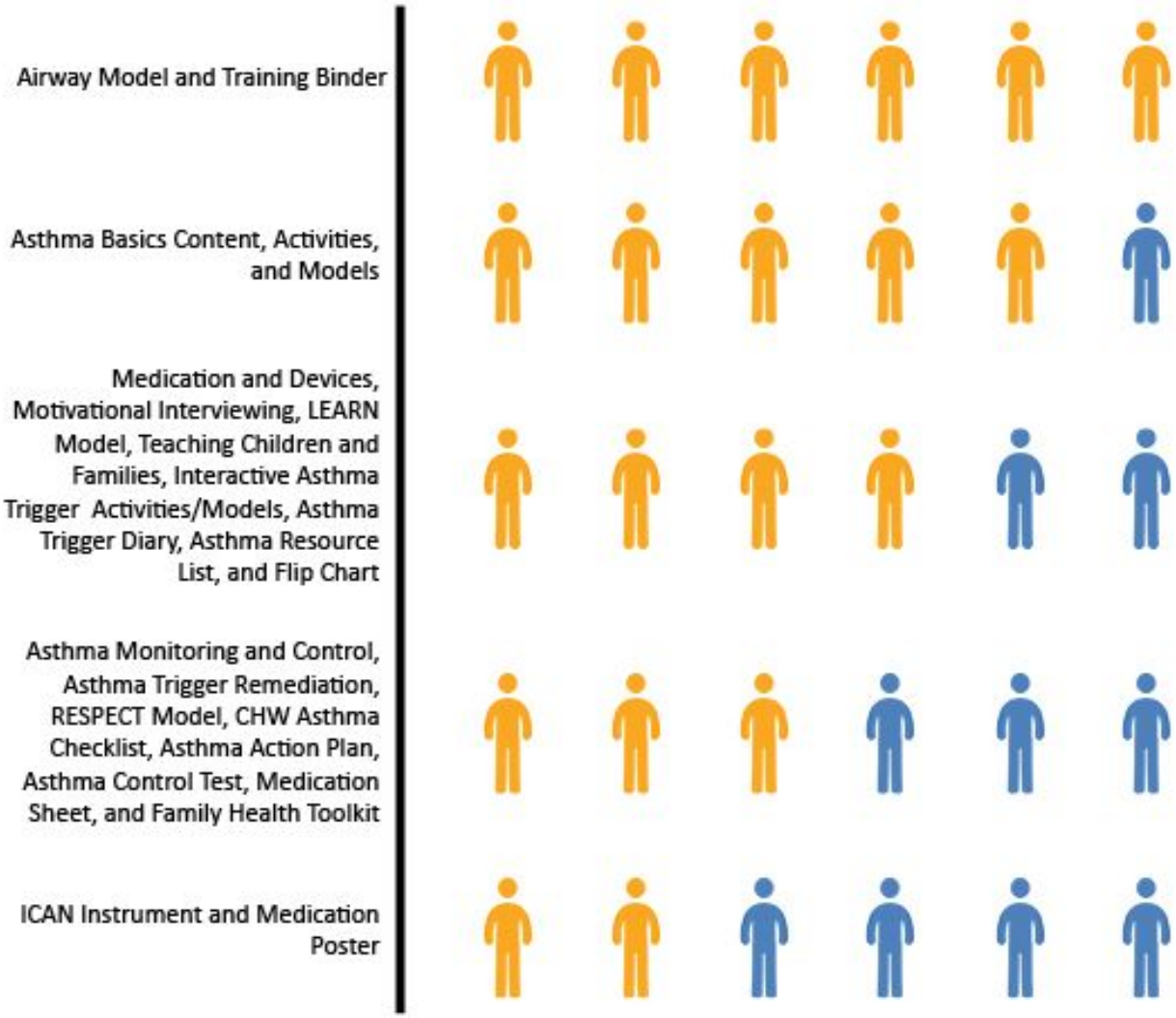
Scale rating 1-4 (1-poor, 2-fair, 3-good, 4-excellent)

Three-Month Post Training Participant Survey

Three months after the training, participants were asked to indicate which skills and topics were the most useful. Most participants reported that asthma basics, asthma trigger identification, and interactive asthma basics activities/models were the most useful topics and skills from the training.

Participants were also provided a list of tools from the training and asked to indicate which tools were most useful. All participants reported the airway model and the training binder were the most useful tools provided from the training (see Table 6 for full details).

Table 6: Topics, Skills, and Tools That Were Rated as Useful (n=6)



Participants (n=6) were asked how they have used the training binder, and all the participants replied that they have referred to the resource lists. Most participants (n=5) also shared the binder with co-workers. Half the participants (n=3) have used the tools in the materials section, and a third of participants (n=2) have used the flip chart and reviewed lecture materials.

Participants were also asked to share one word to describe the training, and most participants replied "informative" (n=3). Other responses included "excellent," "great," and "interesting." See Figure 2 word cloud for visualization of responses.

Figure 2: One Word Description of Training Word Cloud

Question 4: Training Improvement

The fourth evaluation question was "How can we improve the training?" The Asthma CHW Workgroup determined that this question would be measured from the participants' evaluation of the overall program, feedback from Day 1 and Day 2, and debriefing meeting with the trainers. For those sections with an average rating score of three or lower in each section, or with negative feedback, the Asthma CHW Workgroup plans to discuss the comments and improve the program accordingly.

The result of the assessment showed that while the training was of high quality, there is room for improvement. Suggestions to improve the training from the participant and instructors was incorporated into the six recommendations and next steps at the end of this evaluation report.

Day 1 Feedback

Participants were asked in the section evaluations whether the training met their expectations. All participants responded "yes" for both the morning and afternoon sections. One participant shared "I really liked the training" and another shared "A lot of information but very interesting. Love the use of different ways and cheap ways to educate on asthma."

Suggested improvements for the morning session included the following:

- Physiology explained more
- Medications explained more
- Remove acronym references to ease understanding

Suggested improvements for the afternoon session included the following:

- More content-focused
- More interaction
- Cover the navigating the health system topic

In the overall evaluation, participants were asked what information and/or skills are missing from Day 1. Most participants responded positively (E.g. "none" or "great job") (n=6). One participant noted that what was missing was "a more complete view of the respiratory system. I got the feeling that some people misunderstood the anatomy." Another participant noted, "I felt my education I got from the two days was mostly from day one. I really enjoyed the first day."

Day 2 Feedback

In the section evaluations, most participants (number or percent) responded "yes" to the question of whether the training met their expectations for both the morning (92%) and afternoon (92%) sections. One participant shared "the subject matter was interesting" and another shared "presenter was very knowledgeable."

Suggested improvements for the morning session included the following:

- Repetitive information from Day 1
- Too many slides, presentation too long
- More interaction/participation
- More policy information

Suggested improvements for the afternoon session included the following:

- Information already known

In the overall evaluation, most participants (n=11) responded positively regarding if there was information or skills were missing (E.g. “none” or “great job”). One participant noted that what was missing was “knowledge of what we can do. We have the training, now what? What opportunities are there to connect clients with the health department? A more descriptive overview of the program would have been helpful.” More motivational interviewing was asked for as well. One participant shared, “I felt like motivational interviewing was referred to and hyped up on Day 1, but was done so quickly and general, I did not quite understand the reference to it. I can see the benefit, but will need to research more about it.”

Overall Program Evaluation

The participants were asked what they liked the most about this training. The most common responses were motivational interviewing, information, and resources (see Figure 3). The small light green text for the least mentioned words includes the following words: trigger, learning, material, day, participant, explain, knowledge, presenter, and good.

Figure 3: Favorite Part of Training Word Cloud

Participants were also asked for overall feedback and comments regarding the training. Participants appreciated the training. One participant shared, “This topic is so important and so needed in the community,” while another shared, “This training helped me to re-focus on things I have learned over the years.”

Timing of Training Feedback

Participants were asked whether the training length was too short, just right, or too long. Most participants (58%) felt the two-day, 16-hour training was enough time. When asked whether time was appropriately spent on each topic, most responded “yes” (70%). Some comments from those who answered “no” included that, “Too much time was spent on each presentation. The first presentation today (Day 2) was almost a repeat of the presentations the other day” and “The information was repeated too much. Very long days. Difficult to stay focused.”

Overall Training Improvement Feedback

In the overall evaluation, participants were asked what aspects of the training could be improved. Responses were the following:

- Repetitive information for both days
    - "The class could be taught in a day if some of the information was not repeated both days"
    - "I would have liked the sections to be split up into smaller sections with more presenters"
- More interactive (games, videos)
    - "Day 1 was more interactive and I left feeling that I understood. Day 2 was more listen and not as interactive, because of the materials."
- More motivational interviewing
- "Please provide coffee. Great job."

Trainer Feedback

A few weeks after the pilot training, the trainers and the observers of the training were brought together to brainstorm and discuss what went well with the training and what could be improved on for future training sessions.

Trainer Feedback: What Went Well

- Hands-on, breaks from lectures
- Good lecture materials
- Location ok, a little small
- High enthusiasm – especially first day
- Learned a lot!

Trainer Feedback: What to Improve

- Form tables in circles
- More direction for group work provided in the PowerPoint and to the participants
- Connect activities to topic
- Use binder resources/flip chart more in training
- Use motivational interviewing throughout training
- Implementation ideas, possibly in group discussion format
- More discussion/interaction between particpants or trainers and participants
- Mindfulness activities during breaks
- Redundancy – have trainers support not overshadow each other

The Need for the Training

In the three-month post training survey, employers were asked a number of questions to guage their need for the training. Half the employers reported that asthma is a focus of their health care or quality programs (n=2), and all employers indicated 0-25% of their patient population has asthma. Employers self- reported that asthma treatment or care is not one of their high volume or high-cost diagnosis categories, but the UAP is not clear on how they determined this estimate. However, the employers still found value in the training and half the employers (n=2) were willing to pay $115 per participant for future training sessions. Those that said "no" to paying for future trainings explained that they either currently don't have CHWs or they don't have any extra funding for trainings.

Employers were asked whether they felt the training was a good use of their employee's time. All responded "agree"(n=2) or "strongly agree" (n=2). Most of the employers have taken the opportunity to have the participant

who attended the training share the training information and materials with other employees (n=3), which has resulted in an additional 13 individuals trained, outside of the original cohort participants.

Participants who completed the training were eligible to receive additional training on the Utah Asthma Home Visiting Program. All the employers reported being interested in this additional training and adopting the program.

Limitations

There were a number of limitations that impacted the evaluation outcomes. The Asthma CHW Workgroup intended to recruit participants with experience working as a CHW in order to best simulate the training situation. The UAP wanted CHWs with at least five years of experience but the majority of particpants had less than one year. Despite the recruitment email and flier detailing the qualifications for participating in the pilot training, some participants did not have the CHW work or volunteer experience, and so their feedback may be skewed by their lack of CHW competency training and experience. Future participants will need to have experience working as a CHW (as defined by the Utah CHW Coalition), or a CHW certificate indicating that they have been trained on the core competencies of working as a CHW. The Utah Asthma CHW Training is intended to follow this level of CHW training as an asthma-specific module. Participants were also reimbursed for their time participating in the pilot, which may have affected their responses. We encouraged the participants multiple times throughout the training to provide their honest feedback in their evaluations and were provided anonymity in their evaluation responses. A final limitation is that some of the findings in this evaluation may be specific to the trainers versus the overall training. In future trainings, different trainers may be used, and the evaluation results may change. However, the UAP support (i.e. instructor binder, meetings with instructor, standardized training content) provided prior to training will help to reduce variability of trainer outcomes.

Recommendations

The purpose of the evaluation was to identify strengths and weaknesses from the Utah Asthma CHW Training. The evaluation determined the quality of trainer presentations, the quality of training content, the knowledge gained by participants, and the applicability of the training content. Below are the recommended actions based on the evaluation findings.

1. **Re-organize the time.** Consider four sessions held over the course of two to four weeks. Each session could be three hours in length. This would help with the repetition in the training as a way to reinforce over an extended period of time rather than seem redundant due to the short time interval. It will also help participants maintain focus through shorter training periods. Finally, the shorter sessions over a longer period of time will also allow more time for application of skills and knowledge learned between training sessions.
2. **Include language in the trigger assessment session to introduce the Utah Asthma Home Visiting Program.** Also, add an optional last session as the first training session for adopting the Utah Asthma Home Visiting Program.
3. **Review the motivational interviewing topic at beginning of training.** Incorporate motivational interviewing principals throughout the training.
4. **Revamp the PowerPoint presentations to better incorporate interactive activities throughout training.** Remove extra slides and make sure materials and content match the CHW position and scope of practice.
5. **Better prepare presenters with binder materials and final materials.** The UAP will develop a training manual and establish a contract with trainers outlining expectations for preparing and presenting the materials. Preparation will include:
    a. review of the trainer binder by UAP and presenter,
    b. one-on-one training with the UAP Asthma CHW Training Coordinator of the course content and how it relates to the participant binders,

c. group training with all presenters to share feedback and updates from previous training evaluation and ensure coordination and flow of training topics, and
d. mandatory attendance to a debriefing meeting to discuss what went well and what to improve for future training sessions.

6. **Organize future training session recruitment plan, criteria for participant inclusion, cost per training program, and frequency of trainings.**

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Appendices

Appendix A: Training Agenda

Utah Asthma CHW Training Agenda and Details

Date: Wednesday May 18th and 25th, 2016
Time: 8:00 am – 4:30 pm
Where: Utah State Library for the Blind and Disabled, Room 219
250 N 1950 W, Salt Lake City, UT 84116

Breakfast and lunch provided by AztraZeneca

Day 1 (May 18th) Agenda

Time	Topic	Presenter
8:00 am	Check-in	Brittany Guerra
8:30 am	Asthma Basics and Burden	Nancy Cunningham, RN Holly Uphold, PhD
10:30 am	Asthma Medications and Devices	Brandon Anderson, RT
	Lunch 12:00 pm – 1:00 pm	
1:00 pm	Asthma Diagnosis Monitoring	Andrea Jensen, CHES
3:45 pm	Asthma Resources	Andrea Jensen, CHES
4:15 pm	Wrap-up	Brittany Guerra

Day 2 (May 25th) Agenda

Time	Topic	Presenter
8:00 am	Check-in	Brittany Guerra
8:30 am	Utah Asthma Triggers	Scott Collingwood, PhD
11:30 am	Challenges Discussion	Scott Collingwood, PhD
	Lunch 12:00 pm – 1:00 pm	
1:00 pm	Motivational Interviewing	Bob Dwyer, LCSW
4:00 pm	Wrap-up	Brittany Guerra

Appendix B: Utah Asthma CHW Training Outline

Utah Asthma Community Health Worker Training

The Utah Asthma-Specific Training for Community Health Workers was adapted from the Massachusetts Department of Public Health (MDPH) Asthma Home Visit Training outline.

***Overall Training Goal*:**

Train community health workers on asthma basics, management, and communicating with the patient and family. This training will address the clinical and environmental components of asthma management, including:

- Basic anatomy and physiology of asthma
- Recognizing asthma control, or lack of control
- Medications and delivery devices
- Asthma action plans
- Preventive care (including flu shots, age specific guidelines for prevnar 13 and pneumovax vaccinations, vaccine schedules, and well visits) and communication with medical home
- Assessing parent expectations and understanding of asthma, personal goals and readiness to change
- In-home remediation strategies (integrated pest management, smoke free rules, housing rights, social service interventions) and use of intervention products
- Motivational Interviewing (MI) techniques, principles and tools and incorporating MI in asthma home visiting with families

Use of scenarios and role plays will allow trainees to apply knowledge throughout the training and address such issues as: (a) Health management within the household context, including health beliefs and values (e.g. understanding chronic nature of asthma, traditional treatments, fear of steroids) and economic needs and community-based resources, such as fuel assistance, medication assistance, smoking cessation and other services. (b) Coordination and integration with the medical home, including systems to prioritize issues for the clinical team, and to reinforce patient communication with the medical home.

Utah Asthma-Specific Training for Community Health Workers

DAY 1: Asthma Basics
(8:30AM-4:30PM) 7 hours

Training Agenda:

PRE-TEST administered (to measure an increase of knowledge due to the training)

1. **WELCOME & OPENING DISCUSSION**
   - ☐ Ask CHW participants' level of experience working with people who have asthma.
     - Brainstorm and discuss challenges in working with families with children who have asthma.
   - ☐ Review goals and agenda for training.
     - What do you hope to gain from this training?

2. **ASTHMA BASICS**
   - ☐ What is asthma?
     - Physiology – what's happening
     - Identify characteristics and symptoms of asthma
     - Demonstrations with pool noodle, asthma airway models
     - Straw Breathing exercise

   - ☐ What is an asthma trigger?
     - Brief overview of what a trigger is
     - Identify most common asthma triggers: http://www.cdc.gov/asthma/triggers.html
     - Bowl trigger demonstration
     - Will cover triggers in more detail in Day 2

   - ☐ Asthma Statistics in Utah
     - Adult prevalence
     - Children prevalence
     - Utah map of prevalence
     - Missed school days/work days
     - ER/Hospital costs

   - ☐ Asthma cause
     - No known cause http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/causes
       - Researchers think some genetic and environmental factors interact to cause asthma, most often early in life. These factors include:
         - An inherited tendency to develop allergies, called atopy (AT-o-pe)
         - Parents who have asthma
         - Certain respiratory infections during childhood
         - Contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing
       - If asthma or atopy runs in your family, exposure to irritants (for example, tobacco smoke) may make your airways more reactive to substances in the air.
       - Some factors may be more likely to cause asthma in some people than in others. Researchers continue to explore what causes asthma.
     - Hypothesis: http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/causes
       - Hygiene hypothesis – early germ exposure prevents asthma

- http://www.mayoclinic.org/diseases-conditions/childhood-asthma/expert-answers/hygiene-hypothesis/faq-20058102
  - There is no cure, so the goal is control with trigger and medication management

☐ ***Pair activity****: Participant pairs role play teaching asthma basics to caregivers of child with asthma*

3. ASTHMA MEDICATIONS

- ☐ Explain the difference between medicines used to control the underlying inflammation of asthma and those used to treat flare-ups of asthma symptoms (i.e., controller medicines and rescue medicines).
- ☐ Demonstrate or show different asthma medicines to participants.
  - chart
- ☐ Describe special considerations when using asthma medications.
- ☐ Discuss common concerns about medications.
- ☐ Discuss role of CHW in talking with families about asthma medications (i.e., reinforce message from provider), including ways of promoting medication adherence with families.
  - Barriers to taking asthma medications

4. ASTHMA TOOLS – DEVICES AND DEMONSTRATIONS

- ☐ Describe the different delivery systems for asthma medicines.
- ☐ Demonstrate the correct use of the different delivery systems for asthma medicines.
  - UAP How to use an inhaler
    https://youtu.be/Rdb3p9RZoR4
  - UAP Using a spacer
    https://youtu.be/uJy97bTdGzI
  - CDC Inhaler Technique Videos (English and Spanish)
    http://www.cdc.gov/asthma/inhaler_video/default.htm
- ☐ Nebulizer
- ☐ DPI vs. MDI

☐ ***Group activity***: *Trainer hands out a sample asthma medication to all the participants. Each participant identifies the medication they have, what type of medication (controller or rescue), what it does, and how it is used.*

LUNCH

5. CHW ROLE IN ASTHMA

- ☐ Discuss where the CHW fits in the picture: school, provider, community, and family.
- ☐ Discuss the CHW asthma documentation template that shows the bare minimum of what the CHW should collect at each patient interaction.

6. FROM DIAGNOSIS TO MANAGEMENT in Asthma Context

- ☐ Review path of patient from diagnosis of asthma to managing asthma, clearly using and defining common asthma jargon and terminology in plain and clear language.
  - Patient gets enrolled in health insurance.
  - Patient attends regular PCP check-ups.
    1. Discuss what questions to ask and topics to discuss at PCP check-ups (factsheet)

- Patient is diagnosed with asthma
    1. Provider fills out asthma action plan for patient
    2. Provider prescribes controller and/or quick-relief medications
        a. Prescription assistance programs can be used for medications
- Child patient has Asthma Action Plan put on file at school, with self-management release form.
- Patient has regular PCP visits to determine management of asthma.
- PCP helps patient with step-up/step-down of asthma.

☐ Review preventative care, including flu shots, age specific guidelines for prevnar 13 and pneumovax vaccinations, vaccine scheudles, and well visits, and practice communication with medical home.

☐ ***Pair activity:*** *Participants role play helping patient navigate health care system in two scenarios:*
1. Newly diagnosed asthma patient
2. Previously diagnosed but poorly managing asthma patient

7. MONITORING ASTHMA – CONTROL STRATEGIES

☐ Self-Management Strategies:
- Asthma Control Test and rules of two:
    - Explain the Asthma Control Test and the rules of two to monitor child's asthma
    - Review asthma control test questions (refer to power point presentation).
- Peak-Flow Meter (for 6 and older)
    - What it is, how it's used, pros and cons
- Symptom Control (for 5 and under)
- Asthma Diary
    - tracking symptoms
    - e Asthma Tracker, related technologies
- Asthma Action Plan
    - Describe what an asthma action plan is and how it is used to monitor and treat asthma early.
        - Discuss who writes them, who should have a copy, who do you go to if AAP not complete, and how it can be used by the family to monitor and treat their child's asthma.
        - Explain the use of asthma zones (GREEN – YELLOW – RED) to monitor and treat asthma.
        - Review handout of Asthma Action Plan.
            - During your home visit, make sure that a family has an AAP and that the AAP is posted for a family to easily find and refer to.

☐ Discuss ways to help families better monitor and manage their child's asthma.
- Common problems seen
- problem solving, environmental rearrangement (more detail second day), social support, self-monitoring, and making behavior change plans (details on specific intended action, when this will occur and how, potential barriers, and potential solutions to barriers)
    - Include printed samples of different behavior change plans.

☐ ***Pair Activity:*** *Participants practice scenarios with sample action plan to determine which zone the asthma patient is in.*

☐ Learn how to recognize early and late warning signs of asthma and what families should do.
- *Brainstorm with group a list of early warning signs and then a list of late warning signs.*

- What to do in case of an asthma attack training
- Respond to breathing emergencies

☐ ***Case Study/role play with full class feedback:*** *Participants choose three monitoring principles to teach the caregiver for a specific case study and role play teaching these principles to the caregiver in front of full group. Group provides feedback.*

8. CHW RESOURCES

☐ Discuss where asthma community health workers can get support
- GHHI
- Legal resources, landlord and housing rights
  - Poor housing conditions – how to address this
  - What to do to address neighbors smoking and shared ventilation
- Funding support
- Spacers and medication (fit under section 3)
  - Pharmacy coupons
  - Needy meds – medication payments
- Community clinics, care clinics, hospitals, free clinics system
- Tobacco Quit lines – smoking resources, etc.
- Co-morbidities and associated resources
- Open Airways program awareness – ALA other programs (Camp Wyatt).
- IPM – Utah State University
- CHW Association at UPHA, and any other associations?
- UAP Asthma In-Home Visit Program, other similar programs

☐ Discuss basic skills for how to research online reliable information

☐ Asthma Policies
- Inhaler law
- Epi pen recommendation
- AAP at school
- Recess Guidance

9. HOMEWORK ASSIGNMENT FOR DAY 1

1. With other participants, identify the following resources:
- *What is available to support smoking cessation from Utah's Tobacco Prevention and Control Program and major insurers?*
- *Find out your state's sanitary code for housing and who enforces it.*
- *Find financial resources for low-income home owners.*

2. Bring a resource binder to the next session (Day 2), if you have one, to share with other participants.

10. EVALUATION/WRAP-UP

Day 2: Working with Families
(8:30AM-4:30PM) 7 hours

Training Agenda:

SIGN-IN and WELCOME

11. Review and questions

As proceed with trigger assessment and reduction training, reference participant resource binders and add suggested resources as they come up with the trigger discussion

12. THE BIG PICTURE: COMMON UTAH TRIGGERS

Use worksheet: http://health.utah.gov/asthma/pdfs/factsheets/triggers_english.pdf

Link between asthma/allergies and the home environment

- ☐ Identify most common asthma triggers – most likely to trigger an asthma attack if encountered (CDC) http://www.cdc.gov/asthma/triggers.html
    - Tobacco smoke
    - Dust mites
    - Outdoor air pollution
    - Cockroach allergen
    - Pets
    - Mold
    - Smoke from burning wood or grass
- ☐ Identify most prevalent Utah- specific asthma triggers (2013 Trigger Report) – potential sources of allergens and irritants (outdoor sources and indoor sources).
    - Outdoor
        - Outdoor air quality
        - Cold air
    - Indoor
        - Carpet or rugs in bedroom
        - Pets indoors and in bedroom
        - Natural Gas/propane for cooking
        - Wood-burning fireplace or stove
        - Mold
        - Mice/rats
        - Smoking
        - Describe that people in US spend most of their time indoors and at home. Also, children with asthma are at great risk for adverse health effects from poor housing.
- ☐ Cover top 3 triggers.
- ☐ Let group decide which additional 5 triggers they would like to discuss in more detail from list.

13. OUTDOOR AIR QUALITY

- ☐ It is important to learn what level of air pollution you are sensitive to
- ☐ There are health risks associated with physical activity outdoors when air pollution levels are high. Physical activity causes people to breathe faster and more deeply allowing more pollutants to be inhaled.
- ☐ Tips for protecting your lungs during poor air quality days:
    - Check air quality levels before outdoor activities (health.utah.gov/utahair)

- Inversion: PM2.5. We know that indoor air quality is better than outdoor air quality during an inversion.
  - Move exercise indoors when air pollution reaches unhealthy levels.
- Ozone:
  - The best time for outdoor summer physical activity is before noon or after 6:00 p.m.
  - If you are physically active between noon and 6:00 pm:
    - Consider light to moderate activity (e.g., walking instead of running).
    - Consider indoor activities.
- Take your medications as directed by your physician

14. COLD AIR

http://health.utah.gov/asthma/pdfs/factsheets/triggers_english.pdf

- ☐ Wear a scarf over your mouth and nose in cold weather.
- ☐ Dress warmly in the winter or on windy days.

15. CARPET AND RUGS IN ROOM, AND GENERAL CLEANLINESS

- ☐ Describe how pesticides, allergens, and general chemicals in the home can cause allergic reactions, asthma/asthma exacerbation, and toxic exposure effects.
- ☐ Explain dust mites and dust as common asthma triggers and key remediation strategies.
  - Use mattress and pillow covers
  - Wash linens and bedding in hot water (at least 130 degrees F)
- ☐ Discuss ways of keeping a home clean including controlling the source, creating smooth and cleanable surfaces, reducing clutter, and using effective cleaning methods.
- ☐ Discuss safe cleaning products. Describe volatile organic compounds including cleaning products, air fresheners, paints, carpets. Discuss ways to avoid or control VOCs by controlling the source or by ventilation.
- ☐ Discuss landlord responsibilities in keeping areas clean and in good sanitary condition.

16. ANIMAL ALLERGENS

- ☐ Pets may be an allergen. Discuss strategies for dealing with pets.
  - Remove pet from home OR keep out of child's bedroom and play area.
  - Use a HEPA air filter to remove pet allergens from the air.
  - Vacuum bedroom and cloth covered furniture twice a week to remove pet hair.
  - Drape a pet blanket on your pet's favorite spot and wash blanket weekly in hot water.
  - Remove carpet, drapes and cloth cover furniture that can trap the asthma triggers that come from pets.
  - Use mattress and pillow covers
  - Wash linens and bedding in hot water (at least 130 degrees F)

17. NATURAL GAS/PROPANE

- ☐ If use gas stove for cooking, do not use them as a home heating source.
- ☐ Properly ventilate the room where the stove is used.

18. WOOD SMOKE

http://health.utah.gov/utahair/pollutants/woodsmoke/

a. Wood smoke contains a large number of compounds that can be harmful to your health, but the pollutant that is typically of primary concern is PM2.5
b. Keep your indoor PM levels low by not using particle sources like wood stoves and fireplaces on bad air days.

c. Make sure your wood stove or fireplace is properly installed, properly vented, and well maintained. Poor ventilation and maintenance can lead to hazardous levels of carbon monoxide and particulate matter in your home.
d. Follow the action forecast (air.utah.gov/forecast.php) from the Utah Division of Air Quality. On potential bad air days with voluntary or mandatory action alerts, reduce or avoid burning wood and other solid fuels. http://www.health.utah.gov/utahair/pollutants/woodsmoke/

19. MOLD

- ☐ Excess moisture creates mold that is associated with asthma and other respiratory problems.
- ☐ Identify sources of moisture in the home from inside and outside.
- ☐ Discuss ways to prevent and/or control excess moisture and mold in the home.
- ☐ Describe the importance of ventilation in maintaining health.
  - Ventilation is necessary to add heat, remove heat, add or remove humidity, and dilute /remove contaminants.
  - Local exhaust ventilation removes contaminants from a point source, while whole house ventilation uses fresh air to dilute contaminants.
- ☐ Explain how temperature shifts and extremes in the home can cause asthma attacks.

20. PESTS

- ☐ Pests (i.e., roaches and rodents) can create allergens and be vectors of disease.
- ☐ Make house less hospitable for pests. Prevent entry, control food, water, and places for shelter.
- ☐ Explain Integrated Pest Management as the recommended strategy for controlling or eliminating pests.
- ☐ Discuss the use of illegal and legal pesticides - most are toxic and can be dangerous. Some are banned.

21. ENVIRONMENTAL TOBACCO SMOKE

- ☐ Discuss health effects and their associated contaminants in the home, including environmental tobacco smoke (ETS).
  - Why smoking exacerbates asthma
  - Why many asthma smokers continue to smoke because think their asthma gets worse when they try to quit – physiological reasons
- ☐ Discuss strategies to reduce exposure to ETS.
- ☐ Review quitting resources available in Utah.

22. EXERCISE

http://health.utah.gov/asthma/pdfs/factsheets/triggers_english.pdf

- ☐ Make a medicine plan that allows you to exercise without symptoms.
- ☐ Warm up before doing exercise and cool down afterward.
- ☐ Take an inhaled bronchodilator (albuterol) medication fifteen minutes before exercising, or as instructed by your doctor or pharmacist.

23. RESPIRATORY INFECTIONS

http://health.utah.gov/asthma/pdfs/factsheets/triggers_english.pdf

- ☐ Avoid persons with colds, the flu, or other respiratory infections.
- ☐ Talk to your doctor about getting your annual flu shot.
- ☐ You may need increased doses of your asthma medications while you are sick.
- ☐ DO NOT take over-the-counter cold remedies, like antihistamines and cough syrup, unless you are advised to do so by your doctor or pharmacist.

24. STRONG EMOTIONS

25. CHALLENGES DISCUSSION

- ☐ Discuss challenging situations and strategies for addressing them such as deplorable conditions, overcrowding, poor housekeeping and hoarding, illegal apartments, undocumented residents.

- ☐ ***Group activity****: Participants role play addressing one of below issues with the family and discussing strategies for reducing the issue in the home, keeping in mind cultural humility, managing conflict, and time management challenges. Group provides feedback on role plays.*

    - *Wood smoke*
    - *Exercise*
    - *Cold air*
    - *Respiratory infections*
    - *Strong emotions*
    - *Outdoor air quality*
    - *Natural gas/propane*
    - *Mold role play*
    - *Tobacco role play*
    - *Pest role play*
    - *Cleaning role play*
    - *Pet role play*

LUNCH

26. WORKING WITH FAMILIES

- ☐ Review and discuss recommendations for working effectively with families.
    - Recognize and respect clients' cultures and religious beliefs. Practice cultural humility.
    - Avoid stereotyping, assigning labels or arguing with clients.
    - Maintain client confidentiality at all times.
    - Do not provide a medical diagnosis.
    - Avoid confronting the landlord about any issues related to the tenant.
    - Avoid giving legal advice of any type.
    - Safety/boundaries with family.
    - Time management and staying on task.

- ☐ Emphasize empowerment of patient:
    - Help others identify and develop to their fullest potential
    - Work in ways that increase individual and community empowerment

- ☐ Educating and Goal-Setting with Families
    - Encourage participants to ask open-end questions that are more likely to elicit a detailed response instead of a yes or no answer.
    - Emphasize that two-way communication is essential.
    - Develop joint goal-setting with the family on asthma management.
        - Apply L.E.A.R.N. and R.E.S.P.E.C.T. to achieve the goals which involves negotiating, compromising and motivating families.

- L.E.A.R.N. Model for cross-cultural communication:
    - Listen with sympathy and understanding to the patient's perception of the problem
    - Explain your perceptions of the problem
    - Acknowledge and discuss the differences and similarities
    - Recommend treatment
    - Negotiate agreement
- R.E.S.P.E.C.T. Model of cross-cultural communication:
    - Rapport
        - Connect on a social level
        - Seek the patient's point of view
        - Consciously attempt to suspend judgment
        - Recognize and avoid making assumptions
    - Empathy
        - Remember that the patient has come to you for help
        - Seek out and understand the patient's rationale for his or her behaviors or illness
        - Verbally acknowledge and legitimize the patient's feelings
    - Support
        - Ask about and try to understand barriers to care and compliance
        - Help the patient overcome barriers
        - Involve family members if appropriate
        - Reassure the patient you are and will be available to help
    - Partnership
        - Be flexible with regard to issues of control
        - Negotiate roles when necessary
        - Stress that you will be working together to address medical problems
    - Explanations
        - Check often for understanding
        - Use verbal clarification techniques
    - Cultural Competence
        - Respect the patient and his or her culture and beliefs
        - Understand that the patient's view of you may be identified by ethnic or cultural stereotypes
        - Be aware of your own biases and preconceptions
        - Know your limitations in addressing medical issues across cultures
        - Understand your personal style and recognize when it may not be working with a given patient
    - Trust
        - Self–disclosure may be an issue for some patients who are not accustomed to Western medical approaches
        - Take the necessary time and consciously work to establish trust

    - Source: Welch, M. (1998). Enhancing awareness and improving cultural competence in health care. A partnership guide for teaching diversity and cross-cultural concepts in heath professional training.

San Francisco: University of California at San Francisco.

- ☐ ***Group activity:*** *Participants role play using LEARN and RESPECT techniques to assess parent expectations and understanding of asthma, personal goals, and readiness to change. Group provides feedback on role plays.*

27. TOOLS FOR MOTIVATIONAL INTERVIEWING in Asthma Context

- ☐ Brief overview of motivational interviewing.
- ☐ Review tools for motivational interviewing.
    - OARS

- ☐ Discuss how to assess if you're using motivational interviewing successfully.

- ☐ ***Pair activity:*** *Participants are given case studies and practice incorporating MI techniques to address each scenario with the family in a home visit. Group provides feedback on role plays.*

28. WRAP UP

- ☐ ***Group activity:*** *Using the room as a scale (from 1 to 10), participants assess how important and confident they are helping families with asthma by standing along an imaginary line in the room. Participants discuss which number they chose and why and what would it take to move them to the next number.*

- ☐ ***Next Steps:*** *Participants discuss about how to incorporate a motivational interviewing, empowerment approach into their work.*

29. EVALUATION

30. KNOWLEDGE GAINED POST-TEST

Teaching/Learning Resources

- Treatments and Symptoms of Asthma in Children (IHC Primary children): https://www.youtube.com/watch?v=ew-XorW8zzg
- Asthma Basics (1 hour free online program): http://www.lung.org/lung-disease/asthma/learning-more-about-asthma/asthma-basics.html
- Game for the kids: Video Games – Starbright Foundation
- Childhood Asthma https://www.youtube.com/watch?v=Awu0_Iv6fjU
- Breathe Easies: Clean up the Mold (EPA) https://www.youtube.com/watch?v=u92LyXRlMnw
- Breathe Easies: Don't smoke in the house (EPA) https://www.youtube.com/watch?v=bgWtEeshk0Y
- Breathe Easies: Vacuum up the floor (EPA) https://www.youtube.com/watch?v=Ktv-DP1U7rk
- Exercise and Asthma: https://www.youtube.com/watch?v=cu3khJOOUrU
- Cough Variant Asthma Explained: https://www.youtube.com/watch?v=iVqs_xbaZYY
- Utah County Health Department Asthma Home Trigger Reduction Tips Video
- CONTINUING EDUCATION Asthma Specific Trainings
    - Certified Asthma Educator
    - National Healthy Homes CHW course

Flip Chart Ideas:

- http://asthmaregionalcouncil.org/wp-content/uploads/2014/01/Keys-to-Breathing-Easy-Flipbook-ENGLISH.pdf

Additional Ideas/Methods to Include:

Blog – for CHWs (password protected, or by invitation only).

Methods/Format of Training to Include

- Adult learning theory
- Utah Specific Training. Consider regional aspect of trainings we are thinking of using for Utah to make sure it applies.
- Tools
- Role playing
- Hands on, interactive, skill building activities, strength based empowerment approach
- Brainstorming exercises, self-discovery learning
- Checklist for CHWs regarding resources
- Internship/mentoring period
- Teach back method of training
- Have specialists come in to train on different things? (IPM, Tobacco, GHHI, etc.)
- Evaluation component
- Certificate and how to put it on resume
- Bi-monthly or regular meetings afterwards with trained CHW to reassess knowledge and train on additional topics?
- Could also provide a list of additional trainings to view (give links to other trainings we don't end up using as part of CHW training) (ex. GHHI training module)

Appendix C: Certificate of Completion

Utah Department of Health Asthma Program

CERTIFICATE OF COMPLETION

NAME

This certifies that the above named individual has successfully completed
16 hours of training for

Utah Asthma Community Health Worker Training

Offered in Salt Lake City, UT
on
May 18 & 25, 2016

UTAH DEPARTMENT OF HEALTH
Asthma Program

BHP Utah Department of Health Bureau of Health Promotion

Britany Guerra, Proctor

Utah Asthma Task Force
www.health.utah.gov/asthma

Appendix D: Recruitment Email

Hello Organization,

The Utah Asthma Task Force has been developing an asthma-specific CHW training module over the last year. We will be holding our first Utah Asthma Community Health Worker (CHW) Training Pilot this May in two consecutive Wednesdays, May 18th and 25th, 2016. We would like to invite **one CHW (or related position)** from your organization to represent your organization and attend the pilot training. This training is intended to be additional asthma-specific training to the state CHW core competency training (when it is eventually established).

The CHW must have the following in order to participate:
1. Currently work as a CHW
2. Can be paid or volunteer
3. Must have at least 6 months of experience working as a CHW (or similar position)
4. Must be familiar with the CHW-related core competencies
5. Must work in the community or the health care setting

The training is two consecutive Wednesdays. We are looking for participants who have worked as a CHW and are familiar with the basic CHW core competency skills. Our asthma training is to help the CHW apply these already acquired skills in the context of asthma. We will also ask the participant to help evaluate the program so that we are meeting the needs of CHWs in Utah. We will provide a small stipend to assist this experienced CHW to attend our training for both days.

Attached is an agenda with additional information. Class size is limited due to the nature of the training (only 10-12 participants), so please let me know as soon as possible whether **one experienced CHW** from your organization is able to participate in both days or not.

Please let me know if you have any questions,

UTAH DEPARTMENT OF HEALTH
Asthma Program

Utah Asthma Task Force
www.health.utah.gov/asthma

Appendix E: Recruitment Flier

UTAH DEPARTMENT OF HEALTH
Asthma Program

Utah Asthma Task Force
www.health.utah.gov/asthma

UTAH DEPARTMENT OF HEALTH
Utah Asthma Program

Utah Asthma Task Force
www.health.utah.gov/asthma

Utah Asthma Community Health Worker Training

An evidence based program adapted for Utah by the Utah Asthma Task Force

Who? **Employee or volunteer * Work in health care or community * Experienced**
Includes: community health workers, community connectors, care coordinators, etc.

Why? The training will prepare participants with the knowledge and skills to work with asthma patients and their families.

The 2 day training will cover:

- Asthma basics
- Utah resources
- Utah triggers and remediation
- Asthma-specific motivational interviewing

Training is hands-on and discussion-based, led by qualified experts.

Date: Wednesday May 18 & May 25, 2016

Time: 8am - 4:30pm

Where: Room 219
Utah State Library for the Blind & Disabled
250 N 1950 W, Salt Lake City, UT 84116

Registration is required and free.
Final date to register: May 13, 2016
Class size limited to 12 participants.

Please contact for registration details: bguerra@utah.gov

Appendix F: Pre-Test Day 1 Questions

Asthma CHW Training Pilot
Day 1 Pre-Training Knowledge Test

1. Asthma symptoms results when the following happens (check all that apply):
    a. The lining of the airways become inflamed and swell.
    b. More mucus is produced.
    c. Muscles around the airways tighten.
    d. Nasal cavity swells.

2. In Utah, _____% of adults have asthma; _____% of children have asthma.
    a. 9%; 6%
    b. 6%; 46%
    c. 18%; 24%
    d. 46%; 9%

3. Which of the following are common asthma symptoms? (circle all that apply)
    a. Chest tightness
    b. Coughing
    c. Difficulty breathing
    d. Upset stomach
    e. Wheezing

4. If you have asthma, your asthma triggers can be different from those of someone else with asthma. Everyone has different asthma triggers.
    a. True
    b. False

5. Which type of asthma medication is taken only when symptoms develop or before exercise?
    a. Controller medication
    b. Tranquilizer medication
    c. Quick-relief/rescue medications
    d. Antacid medication

6. Which type of asthma medication, if prescribed, is taken on a daily basis?
    a. Controller medication
    b. Tranquilizer medication
    c. Quick-relief/rescue medications
    d. Antacid medication

7. What do controller medications do for your body? (circle only one answer)
    a. Neutralizes or reduces acid in the stomach
    b. Reduces inflammation in the airways
    c. Reduces pain
    d. Reverses muscle constriction around the bronchi and bronchioles

8. What is a spacer?

a. A device that spaces the timing between medication doses.
b. A device that helps inhaler medication get deep into the lungs.
c. A device that creates more space in the lungs.
d. A device used to help air expand around the medication.

9. What components are included in an asthma action plan? (check all that apply)
    a. A list of triggers to avoid
    b. Types of medication and dose details and instructions
    c. Dietary restrictions and plans
    d. Directions on what to do when experiencing certain symptoms

10. What is an indicator of poorly controlled asthma?
    a. You refill your quick-relief medication once a year.
    b. You use your quick-relief medication twice a month.
    c. You wake up with asthma symptoms once a week.

11. What is a sign of an asthma emergency? (check all that apply)
    a. Medicine is not helping
    b. Having trouble walking or talking
    c. Retractions (a sucking in of the skin in between or around the bones of the chest when inhaling)
    d. Lips, tongue, or tips of fingers are blue

12. What would you do if someone was having an asthma attack? (check all that apply)
    a. Help the person remain calm.
    b. Leave to find help immediately.
    c. Assist the person with self-administering medication; repeat in 20 minutes if person is still having trouble breathing.
    d. Have the person lie down.

13. What are the last four digits of your primary phone number (please remember which number you put and use the same number on all assessments)?

Appendix G: Post-Test and Self-Assessment Day 1 Questions

Asthma CHW Training Pilot
Day 1 Post-Training Knowledge Test

14. Asthma symptoms results when the following happens (check all that apply):
    a. The lining of the airways become inflamed and swell.
    b. More mucus is produced.
    c. Muscles around the airways tighten.
    d. Nasal cavity swells.

15. In Utah, _____% of adults have asthma; _____% of children have asthma.
    a. 9%; 6%
    b. 6%; 46%
    c. 18%; 24%
    d. 46%; 9%

16. Which of the following are common asthma symptoms? (circle all that apply)
    f. Chest tightness
    g. Coughing
    h. Difficulty breathing
    i. Upset stomach
    j. Wheezing

17. If you have asthma, your asthma triggers can be different from those of someone else with asthma. Everyone has different asthma triggers.
    a. True
    b. False

18. Which type of asthma medication is taken only when symptoms develop or before exercise?
    a. Controller medication
    b. Tranquilizer medication
    c. Quick-relief/rescue medications
    d. Antacid medication

19. Which type of asthma medication, if prescribed, is taken on a daily basis?
    a. Controller medication
    b. Tranquilizer medication
    c. Quick-relief/rescue medications
    d. Antacid medication

20. What do controller medications do for your body? (circle only one answer)
    a. Neutralizes or reduces acid in the stomach

b. Reduces inflammation in the airways
c. Reduces pain
d. Reverses muscle constriction around the bronchi and bronchioles

21. What is a spacer?
    a. A device that spaces the timing between medication doses.
    b. A device that helps inhaler medication get deep into the lungs.
    c. A device that creates more space in the lungs.
    d. A device used to help air expand around the medication.

22. What components are included in an asthma action plan? (check all that apply)
    a. A list of triggers to avoid
    b. Types of medication and dose details and instructions
    c. Dietary restrictions and plans
    d. Directions on what to do when experiencing certain symptoms

23. What is an indicator of poorly controlled asthma?
    a. You refill your quick-relief medication once a year.
    b. You use your quick-relief medication twice a month.
    c. You wake up with asthma symptoms once a week.

24. What is a sign of an asthma emergency? (check all that apply)
    a. Medicine is not helping
    b. Having trouble walking or talking
    c. Retractions (a sucking in of the skin in between or around the bones of the chest when inhaling)
    d. Lips, tongue, or tips of fingers are blue

25. What would you do if someone was having an asthma attack? (check all that apply)
    a. Help the person remain calm.
    b. Leave to find help immediately.
    c. Assist the person with self-administering medication; repeat in 20 minutes if person is still having trouble breathing.
    d. Have the person lie down.

26. What are the last four digits of your primary phone number (please remember which number you put and use the same number on all assessments)?

UTAH DEPARTMENT OF HEALTH
Asthma Program

Utah Asthma Task Force
www.health.utah.gov/asthma

Day 1 Pre/post training knowledge gain self-assessment

Please indicate your level of agreement with each of the following statements pre-training and post-training:

	Pre-Training				Post-Training			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
I know correct inhaler technique.	☐	☐	☐	☐	☐	☐	☐	☐
I feel confident teaching asthma basics.	☐	☐	☐	☐	☐	☐	☐	☐
I feel like I have the knowledge and tools to help someone control their asthma.	☐	☐	☐	☐	☐	☐	☐	☐
I understand asthma medications and their uses.	☐	☐	☐	☐	☐	☐	☐	☐
I feel like I have a basic understanding of asthma.	☐	☐	☐	☐	☐	☐	☐	☐
I feel confident in my ability to apply the asthma concepts learned in today's training to a real-life situation.	☐	☐	☐	☐	☐	☐	☐	☐

Appendix H: Pre-Test Day 2 Questions

Asthma CHW Training Pilot
Day 2 Pre- Training Knowledge Test

1. Please list three asthma triggers below:

   Trigger 1:
   Trigger 2:
   Trigger 3:
2. Which of the following is NOT one of the seven healthy home principles?
   a. Keep it SAFE
   b. Keep it MAINTAINED
   c. Keep it CLEAN
   d. Keep it SEPARATED

3. True or False: Children are considered a vulnerable population because they spend most of their time outdoors.
   a. True
   b. False

4. What is NOT part of the pest triangle?
   a. Water
   b. Nest
   c. Sleep
   d. Food

5. What of the following is an effective strategy to reduce allergens or contaminants in the house?
   a. Take off shoes before entering the house
   b. Install air freshners around the house
   c. Use anti-microbials in all products
   d. Keep pets contained in the bedroom

6. As a CHW, what should you do when working with families (mark all that apply)
   a. Recognize and respect a client's culture and religious beliefs
   b. Stereotype clients
   c. Provide medical diagnosis and counsel
   d. Avoid giving legal advice of any type
   e. Stay on task and respect the client time
   f. Maintain client confidentiality at all times
7. What does the "L" in the LEARN model of cross-cultural communication stand for?
   a. Learn all you can about a patient
   b. Like the attitude of the patient at all times
   c. Listen with sympathy and understanding to the patient's perception of the problem
   d. Look at the patient when discussing the patient's problems

8. What does the "T" in the RESPECT model of cross-cultural communication stand for?
   a. Trust

b. Truth
c. Tactfulness
d. Teach

9. What is an appropriate question when using motivational interviewing OARS model?
    a. Tell me how often you use your rescue inhaler?
    b. Don't you want to feel better?
    c. How often have you had to go to the emergency department?
    d. Tell me about how you are managing your asthma?

10. According to the OARS model of motivational interviewing, write down how you would reflect back the following statement:

"My doctor says that it is important for me to take my asthma medications, but I worry about the side effects"

11. What are the last four digits of your phone number?

Appendix I: Post-Test and Self-Assessment Day 2 Questions

Asthma CHW Training Pilot
Day 2 Post- Training Knowledge Test

1. Please list three asthma triggers below:

   Trigger 1:
   Trigger 2:
   Trigger 3:
2. Which of the following is NOT one of the seven healthy home principles?
   a. Keep it SAFE
   b. Keep it MAINTAINED
   c. Keep it CLEAN
   d. Keep it SEPARATED

3. True or False: Children are considered a vulnerable population because they spend most of their time outdoors.
   a. True
   b. False

4. What is NOT part of the pest triangle?
   a. Water
   b. Nest
   c. Sleep
   d. Food

5. What of the following is an effective strategy to reduce allergens or contaminants in the house?
   a. Take off shoes before entering the house
   b. Install air freshners around the house
   c. Use anti-microbials in all products
   d. Keep pets contained in the bedroom

6. As a CHW, what should you do when working with families (mark all that apply)
   a. Recognize and respect a client's culture and religious beliefs
   b. Stereotype clients
   c. Provide medical diagnosis and counsel
   d. Avoid giving legal advice of any type
   e. Stay on task and respect the client time
   f. Maintain client confidentiality at all times
7. What does the "L" in the LEARN model of cross-cultural communication stand for?
   a. Learn all you can about a patient
   b. Like the attitude of the patient at all times
   c. Listen with sympathy and understanding to the patient's perception of the problem

d. Look at the patient when discussing the patient's problems

8. What does the "T" in the RESPECT model of cross-cultural communication stand for?
    a. Trust
    b. Truth
    c. Tactfulness
    d. Teach

9. What is an appropriate question when using motivational interviewing OARS model?
    a. Tell me how often you use your rescue inhaler?
    b. Don't you want to feel better?
    c. How often have you had to go to the emergency department?
    d. Tell me about how you are managing your asthma?

10. According to the OARS model of motivational interviewing, write down how you would reflect back the following statement:

"My doctor says that it is important for me to take my asthma medications, but I worry about the side effects"

11. What are the last four digits of your phone number?

Day 2 Pre/post training knowledge gain self-assessment

Please indicate your level of agreement with each of the following statements. Answer for your agreement pre-training and then post-training:

	Pre-Training					**Post-Training**			
	Strongly Agree	Agree	Disagree	Strongly Disagree		Strongly Agree	Agree	Disagree	Strongly Disagree
I know about asthma resources in the community.	□	□	□	□		□	□	□	□
I am able to recognize asthma triggers	□	□	□	□		□	□	□	□
I feel confident in my ability to help people reduce asthma triggers in the home.	□	□	□	□		□	□	□	□
I feel confident in my role as a CHW to assist someone with asthma.	□	□	□	□		□	□	□	□
I am able to assist someone with asthma to get appropriate asthma care.	□	□	□	□		□	□	□	□
I feel like I have the ability to empower families and set goals.	□	□	□	□		□	□	□	□
I feel confident in my ability to apply the asthma concepts learned today to a real-life situation.	□	□	□	□		□	□	□	□

Appendix J: Daily Sectional Participant Evaluation Tools

Asthma CHW Training Evaluation Day 1

We are always looking for ways to serve you better. Please take a moment to complete the short evaluation below. Your feedback will help us better meet your needs in the future.

Day 1, Section 1: Asthma Basics, Medications and Devices

Please indicate your level of agreement with the statements listed below:	Strongly Agree	Agree	Disagree	Strongly Disagree
I found the information in this section useful.	□	□	□	□
The trainers were knowledgeable about the training topics.	□	□	□	□
Participation and interaction were encouraged.	□	□	□	□
The content was organized and easy to follow.	□	□	□	□
Do you intend to use any of the skills or knowledge from session in your work?	□ Yes	□ No	If yes, what skills will you use?	
Did the training in this section meet your expectations?	□ Yes	□ No	If no, why not?	

Please answer the following question for how you felt both before the training session and after the training session.

	Pre-Session Training					**Post-Session Training**				
My understanding of the subject in this section	Excellent □	Very Good □	Good □	Fair □	Poor □	Excellent □	Very Good □	Good □	Fair □	Poor □

Day 1, Section 2: Asthma Diagnosis and Control

Please indicate your level of agreement with the statements listed below:	Strongly Agree	Agree	Disagree	Strongly Disagree
I found the information in this section useful.	□	□	□	□
The trainers were knowledgeable about the training topics.	□	□	□	□
Participation and interaction were encouraged.	□	□	□	□
The content was organized and easy to follow.	□	□	□	□
Do you intend to use any of the skills or knowledge from session in your work?	□ Yes	□ No	If yes, what skills will you use?	
Did the training in this section meet your expectations?	□ Yes	□ No	If no, why not?	

Please answer the following question for how you felt both before the training session and after the training session.

	Pre-Session Training					**Post-Session Training**				
My understanding of the subject in this section	Excellent □	Very Good □	Good □	Fair □	Poor □	Excellent □	Very Good □	Good □	Fair □	Poor □

Asthma CHW Training Evaluation Day 2

We are always looking for ways to serve you better. Please take a moment to complete the short evaluation below. Your feedback will help us better meet your needs in the future.

Day 2, Section 3: Asthma Triggers and Remediation

Please indicate your level of agreement with the statements listed below:	Strongly Agree	Agree	Disagree	Strongly Disagree
I found the information in this section useful.	□	□	□	□
The trainers were knowledgeable about the training topics.	□	□	□	□
Participation and interaction were encouraged.	□	□	□	□
The content was organized and easy to follow.	□	□	□	□
Do you intend to use any of the skills or knowledge from session in your work?	□ Yes	□ No	If yes, what skills will you use?	
Did the training in this section meet your expectations?	□ Yes	□ No	If no, why not?	

Please answer the following question for how you felt both before the training session and after the training session.

	Pre-Session Training					**Post-Session Training**				
My understanding of the subject in this section	Excellent □	Very Good □	Good □	Fair □	Poor □	Excellent □	Very Good □	Good □	Fair □	Poor □

Day 2, Section 4: Motivational Interviewing and Working with Families with Asthma

Please indicate your level of agreement with the statements listed below:	Strongly Agree	Agree	Disagree	Strongly Disagree
I found the information in this section useful.	□	□	□	□
The trainers were knowledgeable about the training topics.	□	□	□	□
Participation and interaction were encouraged.	□	□	□	□
The content was organized and easy to	□	□	□	□

follow.				
Do you intend to use any of the skills or knowledge from session in your work?	□ Yes	□ No	If yes, what skills will you use?	
Did the training in this section meet your expectations?	□ Yes	□ No	If no, why not?	

Please answer the following question for how you felt both before the training session and after the training session.

	Pre-Session Training					**Post-Session Training**				
My understanding of the subject in this section	Excellent □	Very Good □	Good □	Fair □	Poor □	Excellent □	Very Good □	Good □	Fair □	Poor □

Appendix K: Participant Overall Evaluation Tool

Asthma CHW Training Pilot
Participant Evaluation of Overall Program

Please indicate your level of agreement with the following statements:	Strongly Agree	Agree	Disagree	Strongly Disagree
The materials distributed were helpful.	□	□	□	□
This training experience will be useful in my work.	□	□	□	□
The training objectives were met.	□	□	□	□
The meeting room and facilities were adequate and comfortable.	□	□	□	□
Please rate the overall quality of the training:	□ Poor	□ Fair	□ Good	□ Excellent

What did you like most about this training?

What aspects of the training could be improved?

What information and/or skills is this program missing from each day of training?
Day 1: Asthma Basics and CHW Resources

Day 2: Motivational Interviewing and Triggers

The training length of 2 days or 16 hours was: (check the best answer)
□ Enough time
□ Not enough time
□ Too much time

Was time appropriately spent on each topic? □ Yes □ No
If you check "No", please explain:

How do you hope to change your practice as a result of this training?

The goal of this evaluation is to determine how clear, engaging, and useful the training sections were. On a scale of 1-5 (1-poor, 2-fair, 3-good, 4-excellent), how effective were we in achieving this goal in the following content areas:

Content area	Scale rating 1-5 (1-poor, 2-fair, 3-good, 4-excellent)			What did you like or dislike and why?
	Clear	Engaging	Useful	
Role plays				
Lectures				
Class discussion				
Partner activities				
Group activities				
Inhaler technique critique				

Please share any additional comments:

Appendix L: Three-Month Post Training Participant Survey Questions (Modified from Original Pre-test Post-test Questions)

Participant Questions:

1. Asthma symptoms results when the following happens (check all that apply):
    a. The lining of the airways become inflamed and swell.
    b. More mucus is produced.
    c. Muscles around the airways tighten.
    d. Nasal cavity swells.
2. Which type of asthma medication is taken only when symptoms develop or before exercise?
    a. Controller medication
    b. Tranquilizer medication
    c. Quick-relief/rescue medications
    d. Antacid medication
3. What is an indication of poorly controlled asthma?
    a. You refill your quick-relief medication once a year.
    b. You use your quick-relief medication twice a month.
    c. You wake up with asthma symptoms once a week.
4. What would you do if someone was having an asthma attack? (check all that apply)
    a. Help the person remain calm.
    b. Leave to find help immediately.
    c. Assist the person with self-administering medication; repeat in 20 minutes if person is still having trouble breathing.
    d. Have the person lie down.
5. Please list three asthma triggers below:
    a. Trigger 1:
    b. Trigger 2:
    c. Trigger 3:
6. What of the following is an effective strategy to reduce allergens or contaminants in the house?
    a. Take off shoes before entering the house
    b. Install air freshners around the house
    c. Use anti-microbials in all products
    d. Keep pets contained in the bedroom
7. What is an appropriate question when using motivational interviewing OARS model?
    a. Tell me how often you use your rescue inhaler?
    b. Don't you want to feel better?
    c. How often have you had to go to the emergency department?
    d. Tell me about how you are managing your asthma?
8. What does the "L" in the LEARN model of cross-cultural communication stand for?
    a. Learn all you can about a patient
    b. Like the attitude of the patient at all times
    c. Listen with sympathy and understanding to the patient's perception of the problem
    d. Look at the patient when discussing the patient's problems
9. Thinking about the **knowledge and skills** from the UT Asthma CHW Training, which did you find the most useful?

    Knowledge and skills (check all that apply)
    a. Asthma basics
    b. Asthma medication and devices

c. Asthma monitoring and control
d. Asthma trigger identification
e. Asthma trigger remediation
f. Motivational Interviewing
g. LEARN model
h. RESPECT model
i. Teaching children and families
j. Interactive asthma basics activities/models
k. Interactive asthma trigger activities/models

10. Thinking about the **tools** from the UT Asthma CHW Training, which did you find the most useful?

Tools (check all that apply)

a. Airway model
b. CHW Asthma Check List
c. Asthma Trigger Diary
d. Asthma Action Plan
e. Asthma Control Test
f. ICAN Instrument
g. Medication Poster
h. Medication sheet
i. Asthma Resource List
j. Flip Chart
k. Family Health Toolkit
l. Training Binder

11. How have you used the Training binder? (mark all that apply)
    a. Flip chart
    b. Reviewed lecture materials
    c. Used tools in materials section
    d. Resource lists
    e. Shared with co-workers
    f. I haven't used the training binder
    g. Other: _____

12. Have you changed your practice as a result of the training?
    a. If no, why not?
    b. If yes, how?

13. Are you interested in taking this training again?
    a. Yes
    b. No

14. What one word would you use to describe the Utah Asthma CHW Training?

15. What future training topics are you interested in?

16. Please share any success stories you've experienced applying this training with your asthma patients:

Appendix M: Three-Month Post Training Employer Survey Questions

1. Is asthma management a focus of any of your health care or quality programs?
    a. Yes (skip to question 2)
    b. No (skip to question 3)

2. If yes, what percentage of your patient population has asthma?
    a. Less than 25%
    b. 25-50%
    c. 50-75%
    d. Above 75%

3. Is asthma treatment or care one of your high volume or high cost diagnosis categories?
    a. Yes
    b. No

4. Has one of your CHWs had an opportunity to use the training?
    a. If yes, can you share an example of the impact the training had?
    b. no

5. Have you taken the opportunity to have the CHW who attended the UT Asthma Training to share the information with other staff?

    a. If yes, how many of your staff has been trained by the CHW who attended the UT Asthma Training? _____

6. The Utah Asthma CHW Training is eligible for CE credit for CHW certification. If the training costs $115, would you be willing to support your staff in attending the training?

7. Would you be interested in receiving training to provide the Utah Asthma Home Visiting Program?

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